(1)

Supreme Court, U.S.
FILED

No. 00- 001765 MAY 23 2001

OFFICE OF THE CLERK

IN THE

Supreme Court of the United States

PIONEER MAGNETICS, INC.,

Petitioner,

v.

MICRO LINEAR CORPORATION,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

MARK P. WINE
Counsel of Record
OPPENHEIMER, WOLFF & DONNELLY
2029 Century Park East, Suite 3800
Los Angeles, California 90067-3024
(310) 788-5000

Attorneys for Petitioner

167152

COUNSEL PRESS
(800) 274-3321 • (800) 359-6859

15 pp

QUESTIONS PRESENTED

In *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997), this Court unanimously reaffirmed the doctrine of equivalents as an important tool to battle copyists who make insubstantial changes to a patented invention. However, the United States Court of Appeals for the Federal Circuit has refused to allow this sensible tool to be utilized in a broad array of cases by holding that any amendment that narrows a patent claim and is related to any statutory requirement results in prosecution history estoppel. *See Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki*, 234 F.3d 558 (Fed. Cir. 2000).

In the wake of the controversial ruling of the Federal Circuit in *Festo*, a panel of that same court has held in this case that even an inadvertent amendment to a claim made without any bearing whatsoever on patentability is subject to prosecution history estoppel. Thus, even before this Court has had occasion to rule on the sweeping changes to the patent law caused by the Festo decision, the Federal Circuit has gone even further, broadening the application of estoppel to include even those amendments which have no nexus to the "related to patentability" threshold required by this Court. *Warner-Jenkinson*, 520 U.S. at 33.

Thus, even if this Court denies certiorari in *Festo*, it must certainly not do so in this case. It cannot be the law of the United States that inadvertent changes made to patent claims during prosecution which are unrelated to patentability require the patent holder to forfeit the well-established and long-recognized right to the doctrine of equivalents.

The questions presented in this petition, therefore, are as follows:

1) Whether a single word that was added inadvertently to a claim in the process of prosecution without any nexus to a statutory requirement for patentability automatically gives rise to prosecution history estoppel; and

2) Whether a single word that was added inadvertently to a claim and not in response to any objection from a patent examiner automatically gives rise to prosecution history estoppel.

STATEMENT PURSUANT TO RULE 29.6

Petitioner, Pioneer Magnetics, Inc., has no parent corporation and no publicly held company owns 10% or more of its stock.

TABLE OF CONTENTS

	Page
Questions Presented	i
Statement Pursuant to Rule 29.6	iii
Table of Contents	iv
Table of Cited Authorities	vi
Table of Appendices	viii
Opinions Below	1
Statement of Jurisdiction	1
Constitutional and Statutory Provisions Involved	1
Statement of the Case	2
I. The Patent	3
II. The Prosecution History Of Pioneer's Patent	3
III. District Court Litigation	6
IV. Federal Circuit Opinion	6

Contents

	Page
Reasons for Granting the Writ	7
I. Certiorari Should Be Granted Because the Federal Circuit's Decision is in Direct Conflict With Decisions of This Court	9
II. Certiorari Should Be Granted Because the Federal Circuit's Decision Will Negatively Impact the Patent System	13
A. Pioneer Retroactively Weakens the Property Rights of Patent Holders	13
B. Pioneer Encourages Copying Thereby Minimizing the Value of Patents	14
Conclusion	15

TABLE OF CITED AUTHORITIES

Page

Cases:

Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki, 234 F.3d 558 (Fed. Cir. 2000) ..... *passim*

Graver Tank & Mgf. Co. v. Linde Air Products Co., 339 U.S. 605 (1950) 7, 14

Hilton Davis Chemical Co. v. Warner-Jenkinson Co., 114 F.3d 1161 (Fed. Cir. 1997) 13

Sage Products, Inc. v. Devon Industries, Inc., 126 F.3d 1420 (Fed. Cir. 1997) 7

Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 117 S. Ct. 1040 (1997) ..... *passim*

Winans v. Denmead, 56 U.S. 330 (1854) 7

United States Constitution:

Article 1, Section 8 ..... 1, 2

Cited Authorities

Page

Statutes:

28 U.S.C. § 1254(1) 1

35 U.S.C. § 102 5

35 U.S.C. § 102(b) 3

35 U.S.C. § 112 4

35 U.S.C. § 271 6

35 U.S.C. § 271(a) 2

TABLE OF APPENDICES

Page

Appendix A — Opinion Of The United States Court Of Appeals For The Federal Circuit Dated And Decided January 23, 2001 ..... 1a

Appendix B — Stipulation For Entry Of Order Granting Summary Judgment Of Non-Infringement; Order Thereon Of The United States District Court For The Central District Of California, Western Division Dated And Filed September 2, 1999 And Entered September 7, 1999 ..... 12a

Appendix C — Final Judgment Of The United States District Court For The Central District Of California, Western Division Dated And Filed October 21, 1999 And Entered October 25, 1999 ..... 18a

Appendix D — Interpretation Of The United States District Court For The Central District Of California Of U.S. Patent 4,677,366 Dated And Filed July 19, 1999 ..... 20a

Appendix E — The 4,677,366 Patent 39a

Appendix F — Excerpts From File History Of U.S. Patent 4,677,366 ..... 40a

Pioneer Magnetics, Inc. hereby petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The Federal Circuit's opinion affirming the district court's judgment in favor of respondent Micro Linear Corporation is reported at 238 F.3d 1341 and is reprinted herein as Appendix A (App. 1a-11a). The district court's grant of summary judgment as stipulated to by the parties is reprinted as Appendix B (App. 12a-17a). The district court's final judgment of non-infringement is reprinted herein as Appendix C (App. 18a-19a). The district court's Markman interpretation of U.S. Patent 4,677,366 is reprinted herein as Appendix D (App. 20a-38a).

STATEMENT OF JURISDICTION

The Federal Circuit entered its judgment in favor of respondent Micro Linear Corporation on January 23, 2001. The Chief Justice granted an extension of time for filing this petition to and including May 23, 2001. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

Article 1, section 8, clause of the Constitution provides:

> Congress shall have the power . . . to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their Respective Writings and Discoveries.

35 U.S.C. § 271(a) provides:

> "Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States, any patented invention during the term of the patent therfor, infringes the patent.

STATEMENT OF THE CASE

The Federal Circuit in this case has significantly departed from the well-established "doctrine of equivalents" which has been a fundamental principle of patent law for more than a century. The doctrine of equivalents provides that even if a product or process does not literally infringe upon an express term of a patent claim, it may still be found to infringe if there is "equivalence" between an element of the accused product or process and the claimed element of the patented invention. *Warner-Jenkinson*, 520 U.S. at 21. The Federal Circuit in this case, however, has virtually eviscerated the doctrine of equivalents by holding that every claim-narrowing amendment, including amendments not made for reasons of patentability and even inadvertent amendments, creates prosecution history estoppel.

This drastic narrowing of the doctrine of equivalents will undermine the careful balance between the public disclosure of inventions on the one hand, and the limited exclusivity guaranteed by Article 1, Section 8 of the Constitution on the other. As a result, the Federal Circuit's decision in this case which directly conflicts with prior decisions of this Court may seriously disrupt the patent system.

I.

THE PATENT

Petitioner Pioneer Magnetics, Inc. owns United States Patent No. 4,677,366 titled "unity power factor power supply." (App. E). The patent describes circuitry designed to receive variant levels of input voltage and to emit a constant output voltage, thereby providing a steady electrical current source to another circuit.

II.

THE PROSECUTION HISTORY OF PIONEER'S PATENT

The Pioneer patent is directed to a "unity power factor power supply." Briefly stated, the Pioneer patent discloses a particular type of power supply which typically would be implemented as circuitry that is connected to an alternating current line (e.g., an electrical wall outlet) at its input and that provides voltage and current at its output. The claimed control circuit is comprised of sub-circuits, one of which is the "switching analog multiplier circuit." A switching multiplier is a particular class of multiplier and requires a switching action for the proper operation of the multiplier. A clock input provides a periodic signal to switch transistors in the multiplier circuit between on and off states, and such a clock input can be provided by a timer and ramp generator. (App. E).

The application for the Pioneer patent contained nine claims. In the first Office Action, the Patent Examiner rejected claims 1-5, 8 and 9 as being anticipated under 35 U.S.C. § 102(b) by U.S. Patent 4,437,146 to Carpenter. (App. 45a).

However, the Examiner did not assert any prior art rejection against dependent claim 6. Instead, he rejected dependent claim 6 solely under the second paragraph of 35 U.S.C. § 112, which requires that the patent contain "a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. . . ." The Examiner stated that the "last-named circuit means" in claim 6 lacked proper antecedent basis in the claims. (App. 45a).

The patent applicant did not challenge the Examiner's prior art rejection of claims 1-5, 8 or 9. Instead, the applicant corrected the minor problem in the form of the "circuit means" language in claim 6 and re-wrote claim 6 in independent format. (App. 47a-50a). The applicant did this by incorporating all of the limitations that were in dependent claim 6 into independent claim 1. (App. 48a-49a). He then canceled claim 6 and explained what he had done in his remarks:

> Claims 2-6 have been cancelled and the subject matter of those claims has been incorporated into amended claim 1. . . . It is believed that there is no showing in the cited Carpenter Patent 4,437,146 of the specific combination set forth in amended claim 1. It is also noted that *amended claim 1 represents original claim 6 in independent form*, and that claim 6 [as incorporated in claim 1] has been amended to overcome the objection raised under 35 USC 112. Accordingly, amended claim 1 is believed to be allowable.

(App. 49a-50a). (Emphasis added.)

At the same time, the applicant *voluntarily* added a limitation that was not in claim 6. The applicant specified the "multiplier" that claim 6 had originally incorporated by reference from claim 4 to be a "switching" multiplier. (App. 48a-49a). The applicant did not add this limitation to overcome an objection by the Examiner or to to meet any requirement imposed by the Examiner.[1] In fact, there is evidence in the record that the limitation was actually made inadvertently.[2]

---

1. While the Federal Circuit concluded that the "switching" amendment was made to avoid the prior art, not even the trial court reached such a conclusion and it is a finding wholly unsupported by any evidence in the record. Claim 1 was also amended to add a "pulse width modulator." (App. 48a-49a). This limitation alone was sufficient to distinguish over the art since a "modulator" was nowhere taught or suggested in the only reference that was relied upon to reject the claims — the Carpenter patent. There is also no evidence in the record that it was obvious to modify the Carpenter patent to utilize such a component. To the contrary, the Patent Examiner failed to reject a claim over the prior art that had the "modulator" limitation, but not the "switching" limitation – Claim 6. It was also illogical for the Federal Circuit to imply that Pioneer conceded that "switching" was needed to distinguish over the prior art simply because Pioneer remarked in the amendment that "there is no showing in the cited Carpenter Patent . . . of the specific combination set forth in amended claim 1 . . . ." (App. 49a-50a). That was nothing more than an express statement of the novelty that must exist in every patent claim under 35 U.S.C. § 102. Thus, the record clearly shows that there was no reason whatsoever for adding the "switching" limitation.

2. Claim 7 was amended to depend on claim 1 but also recited that the multiplier "is a switching type." (App. 48a-49a). Thus, the same "switching" limitation was affirmatively recited in both an independent and a dependent claim, showing an inadvertent drafting error. The addition of the word "switching" to claim 1 was also not noted in applicant's remarks. To the contrary, applicant stated that "amended claim 1 represents original claim 6 in independent form. . . ." (App. 50a).

III.

DISTRICT COURT LITIGATION

Pioneer sued Micro Linear for patent infringement under 35 U.S.C. § 271. Following the district court's finding that file wrapper estoppel was applicable, the parties stipulated that summary judgment of non-infringement be granted to Micro Linear on the grounds that its accused products do not literally infringe any of the claims of the 4,677,366 patent and that prosecution history estoppel bars Pioneer from asserting under the doctrine of equivalents. Pioneer expressly preserved its right to appeal the validity of the district court's ruling. The court granted summary judgment and entered a final judgment of non-infringement. (App. 12a-19a). A timely notice of appeal was filed.

IV.

FEDERAL CIRCUIT OPINION

Pioneer appealed the district court's summary judgment that none of Micro Linear's products infringe the '366 patent. On appeal, Pioneer advanced a number of substantive and procedural reasons to support its contention that the district court's judgment was in error. In the course of affirming the district court's opinion, the Federal Circuit addressed two of the issues presented by Pioneer.

The first issue considered by the Federal Circuit panel on appeal was whether prosecution history estoppel should be applied to a limitation that was voluntarily added to a patent claim as it was being rewritten in independent format when such limitation was unrelated to any issue of

patentability identified by the patent examiner. Relying exclusively on its *Festo* decision, the Federal Circuit panel held that the mere fact that the amendment was voluntary did not shield it from prosecution history estoppel. (App. 9a). The panel also applied the presumption set forth in *Festo* which provides that any amendment made to a claim is substantially related to an issue of patentability in the absence of clear evidence in the prosecution history to the contrary. (App. 7a-9a). The Federal Circuit took *Festo* further, however, and held that even an inadvertent amendment gives rise to prosecution history estoppel. (App. 8a). Accordingly, on January 23, 2001, the Federal Circuit affirmed the district court's judgment of non-infringement. (App. 11a).

REASONS FOR GRANTING THE WRIT

Petitioner seeks review of the judgment below because: (1) it is in direct conflict with this Court's decision in *Warner-Jenkinson*; and (2) it continues the erosion of patentee rights and protection which began with the Federal Circuit Court of Appeals' decision in *Festo*.

For over a century, the Supreme Court has consistently held that a component infringes an element in a patent claim, even if it is not identical to that element, so long as it is equivalent to that element. *See Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 117 S. Ct. 1040, 1054 (1997); *Graver Tank & Mgf. Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950); *Winans v. Denmead*, 56 U.S. 330 (1854). However, the full scope of equivalents may be barred by an estoppel when a claim is narrowed during prosecution in order to meet requirements for patentability. As the Federal Circuit stated in *Sage Products, Inc. v. Devon Industries, Inc.*, 126 F.3d 1420, 1432 (Fed. Cir. 1997), courts have

consistently held that the purpose of estoppel is to insure that the applicant does not "retrade or renege on a deal struck with the PTO during prosecution."

In order to determine whether estoppel is applicable, the Supreme Court established a case-by-case approach, holding that it is necessary to examine the reason for the amendment. *Warner-Jenkinson*, 520 U.S. at 32. In the event that the reason for the amendment is unclear, the Supreme Court stated that a "rebuttable presumption" arises that the amendment was made for reasons of patentability, thereby triggering prosecution history estoppel. *Id.* at 33.

In complete disregard of this Court's decision mandating the use of a case-by-case approach in applying prosecution history estoppel, the Federal Circuit in *Festo* implemented a rigid rule barring the application of the doctrine of equivalents to any claims amended for reasons relating to patentability. Moreover, in this case, the Federal Circuit took *Festo* even further, applying prosecution history estoppel to *all* amendments, regardless of the reason for their adoption. These decisions directly conflict with the rule set forth by this Court in *Warner-Jenkinson* and seriously undermine the protection provided by the doctrine of equivalents. If the decision in this case is allowed to stand, the patent system as a whole may suffer serious consequences. Patentees will retroactively be deprived of their property interests. The costs of patent prosecution and litigation may increase. New innovations may decline.

Accordingly, in light of the conflict between the Federal Circuit's decision in this case and the previous holdings of this Court, as well as the serious threat this decision poses to the existing patent system, review of this Court is necessitated.

I. Certiorari Should Be Granted Because the Federal Circuit's Decision is in Direct Conflict With Decisions of This Court

Following in the footsteps of *Festo*, the Federal Circuit's decision in this case represents a drastic change in federal patent law relating to the doctrine of equivalents and prosecution history estoppel. Applying the holding it reached in the *Festo* case, the court below abandoned the case-by-case approach to applying prosecution history estoppel which was reaffirmed unanimously by this Court in *Warner-Jenkinson*.

As stated above, in *Festo*, the Federal Circuit virtually eliminated the doctrine of equivalents by setting forth a bright-line rule that any amendment that (a) narrows a patent claim and (b) is related to any requirement for patentability results in prosecution history estoppel.

The *Pioneer* decision, however, marks an even further departure from the doctrine of equivalents. The *Pioneer* court held that even an inadvertent amendment to a claim made without any bearing whatsoever on patentability is subject to prosecution history estoppel. The court stated,

> [e]ven if we were to accept Pioneer's explanation for its amendment, inadvertence is not a sufficient reason to overcome the bar of prosecution history estoppel on the facts of this case. The public notice function of patents would be frustrated by forcing a patentee's competitors to guess whether a patent's claims were drafted and accepted in error.

(App. 8a).

Such reasoning, however, was expressly rejected by this Court in *Warner-Jenkinson*. The petitioner in *Warner-Jenkinson* sought rigid application of prosecution history estoppel, under which any amendment, regardless of the reason for its implementation, would bar the doctrine of equivalents. 520 U.S. at 30. The Court rejected petitioner's suggested approach, stating that it went "too far. *Id.* at 32 n.6. The Court held that implementation of such a *per se* rule would be contrary to the long line of cases that have "probed the reasoning behind the Patent Office's insistence upon a change in claims." *Id.* at 31. Following a review of cases that applied prosecution history estoppel, the Court found that estoppel was applied "only where claims have been amended for a limited set of reasons." *Id.* at 32.

The court in *Warner-Jenkinson* explained as follows,

> [P]etitioner reaches too far in arguing that the reason for an amendment during patent prosecution is irrelevant to any subsequent estoppel. In each of our cases cited by petitioner and by the dissent below, prosecution history estoppel was tied to amendments made to avoid the prior art, or otherwise to address a specific concern — such as obviousness — that arguably would have rendered the claimed subject matter unpatentable.

Id. at 48.

Thus the Court reaffirmed the practice of applying prosecution history estoppel on a case-by-case basis. The court stated:

> [t]oday we adhere to the doctrine of equivalents. . . . Prosecution history estoppel continues to be available as a defense to infringement, but if the patent holder demonstrates that an amendment required during prosecution has a purpose unrelated to patentability, a court must consider that purpose in order to decide whether an estoppel is precluded.

Id. at 40-41.

The opinion in this case, applying the seriously flawed *Festo* reasoning, abandons both the spirit and the letter of *Warner-Jenkinson*. As discussed above, *Festo* adopted an inflexible "bright line" test for prosecution history estoppel which is directly in conflict with the *Warner-Jenkinson* case-by-case approach. By applying that holding in this case, the Federal Circuit essentially eliminated the doctrine of equivalents from every conceivable case where ANY change is made to the language of patent claims during the prosecution process.[3]

The Federal Circuit attempted to conceal its latest expansion of the *Festo* doctrine by suggesting in its opinion that the applicant added the word "switching" to avoid prior art when claim 6 was rewritten in independent form as claim 1. (App. 9a-11a). The Court reached this conclusion by completely ignoring both the evidence in the prosecution history, as well as the declaration of the patent attorney who prosecuted the patent for Pioneer.

3. The practical consequences of the Federal Circuit's decision are enormous as "most patents contain claims that were amended during prosecution." *Festo*, 234 F.3d at 598 (Michel, J. dissenting).

The prosecution record indicates that the "switching" limitation was made inadvertently. Claim 7 was amended to depend on claim 1 but also recited that the multiplier "is a switching type." (App. 48a-49a). Thus, the same "switching" limitation was affirmatively recited in both an independent and a dependent claim, indicating an inadvertent drafting error. Furthermore, the addition of the word "switching" to claim 1 was not noted in the applicant's remarks. The applicant simply stated that, "amended claim 1 represents original claim 6 in independent form. . . ." (App. 50a). Thus, the prosecution history supports petitioner's assertion that the claim was made inadvertently.

Moreover, the Beecher declaration is also evidence that the "switching" limitation was made inadvertently. However, instead of permitting Pioneer to rely upon this declaration in order to overcome the rebuttable presumption, the Federal Circuit dismissed the declaration as being outside the public record. (App. 7a). The court thus concluded, without the benefit of any evidentiary support, that the addition of the word "switching" was in response to a patentability concern. (App. 11a).

The decision to reject the declaration of patent attorney Beecher on the issue of inadvertence because it was not part of the prosecution record was a further application of the "Catch 22" approach to the rebuttable presumption that the Federal Circuit announced in *Festo*. As pointed out by Judge Newman in his *Festo* opinion, this interpretation of *Warner-Jenkinson* converts the rebuttable presumption into "an irrebuttable fiat", a result which could not have been intended by the Supreme Court. *Festo*, 234 F.3d at 630 (Newman, J., concurring in part, dissenting in part). In the instant case, the Federal Circuit's refusal to consider the

Beecher declaration greatly limited Pioneer's ability to overcome the rebuttable presumption that the amendment was made for reasons of patentability. Thus Pioneer was unable to avoid the application of prosecution history estoppel. Clearly nothing in the *Warner-Jenkinson* opinion contemplates such an unfair and inequitable result.[4]

In the final analysis, the Federal Circuit displayed its desire to expand *Festo* beyond its original boundaries to deny relief on appeal to Pioneer when it held that "inadvertence is not a sufficient reason to overcome the bar of prosecution history estoppel on the facts of this case." (App. 8a). This is an especially harsh result given that a "sufficient reason" was fully documented to the trial court in the form of the Beecher declaration, as well as the prosecution record. It is a result which cannot be allowed to stand in light of the policies set forth by this court in *Warner-Jenkinson*.

II. Certiorari Should Be Granted Because the Federal Circuit's Decision Will Negatively Impact the Patent System

A. Pioneer Retroactively Weakens the Property Rights of Patent Holders

The expanded doctrine of prosecution history estoppel set forth in *Pioneer* will weaken the rights of existing patentees. Amendments are a prevalent step in the prosecution process. As Judge Newman observed, a mere

4. On remand, the Federal Circuit in *Warner-Jenkinson* stated that, "[w]here the prosecution history is silent or unclear the district court should give a patentee the opportunity to establish the reason, if any, for a claim change." *Hilton Davis Chemical Co. v. Warner-Jenkinson Co.*, 114 F.3d 1161, 1163 (Fed. Cir. 1997).

ten to fifteen percent of simple patents make it through the process without amendments, while the number of complex applications that escape amendment is "vanishingly small." *Festo*, 234 F.3d at 638 n.21 (Newman, J., concurring in part, dissenting in part).

By expanding the types of claim amendments that trigger prosecution history estoppel even beyond those set forth in *Festo*, the *Pioneer* court has virtually eliminated the doctrine of equivalents as a means of protecting patentees from copyists. As a consequence, the rights of existing patentees in amended claims will be a "hollow and useless thing." *Graver Tank*, 339 U.S. at 607. This decision places most patentees in jeopardy of retroactively losing the value of their intellectual property.

B. Pioneer Encourages Copying Thereby Minimizing the Value of Patents

The bright-line rule set forth in *Festo* and expanded upon in *Pioneer* will provide a windfall to the competitors of existing patentees. By simply reviewing a patent's prosecution history, competitors will be able to determine the claim elements for which there will be no range of equivalents. A competitor can make an insubstantial change to an element and so long as the element has been amended for any reason, the competitor will not be liable for infringement. *Festo*, 234 F.3d at 616 (Michel, J., concurring in part, dissenting in part) (*Festo* "provides copyists a fail-safe method to avoid liability for infringement").

This Court appreciates the disruptive nature of such a change in the patent law. In *Warner-Jenkinson*, this Court stated that, "to change so substantially the rules of the game

now could very well subvert the various balances the PTO sought to strike when issuing the numerous patents which have not yet expired and which would be affected by our decision." *Warner-Jenkinson*, 520 U.S. at 32 n.6. Yet this is the practical effect of allowing decisions such as *Festo* and *Pioneer* to stand. In exchange for the "predictability" and "certainty" which the *en banc* majority found so valuable in *Festo* is the impact of these decisions on innovation. *Festo*, 234 F.3d at 578. Clearly these decisions limit the value of issued patents in a manner not previously contemplated by the patentees. Moreover, all future patentees will be less inclined to seek patents if the rights applicable to patent ownership continue to be limited. It is beyond logic to assume that decisions which narrow the rights of patent ownership will not lead to less innovation and greater copying. Such is the unfortunate legacy of *Festo* and its progeny such as *Pioneer*. Only by accepting certiorari in these cases can the process of returning rights to patent owners begin in earnest.

CONCLUSION

For the reasons set forth above, Pioneer respectfully requests that the Court issue a Writ of Certiorari to review the judgment of the Court of Appeals for the Federal Circuit.

Respectfully submitted,

MARK P. WINE
Counsel of Record
OPPENHEIMER, WOLFF & DONNELLY
2029 Century Park East, Suite 3800
Los Angeles, California 90067-3024
(310) 788-5000

Attorneys for Petitioner

APPENDIX

APPENDIX A — OPINION OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT DATED AND DECIDED JANUARY 23, 2001

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

00-1012

PIONEER MAGNETICS, INC.,

Plaintiff-Appellant,

v.

MICRO LINEAR CORPORATION,

Defendant-Appellee.

DECIDED: January 23, 2001

Before MAYER, *Chief Judge*, NEWMAN and LOURIE, *Circuit Judges*.

MAYER, *Chief Judge*.

Pioneer Magnetics, Inc. (Pioneer) appeals the judgment of the United States District Court for the Central District of California, case number 95-CV-8307, granting Micro Linear Corporation (Micro Linear) summary judgment that none of its accused products infringe Pioneer's United States Patent No. 4,677,366 (the '366 patent). Because the parties do not contest the judgment of literal infringement and the district

court properly concluded that prosecution history estoppel precludes infringement under the doctrine of equivalents, we affirm.

Background

Pioneer owns the '366 patent directed toward a "unity power factor power supply." The patent describes circuitry designed to receive variant levels of input voltage and to emit a constant output voltage, thereby providing a steady electrical current source to another circuit.

The '366 patent consists of four claims: independent claim 1, and dependent claims 2-4. Claim 1 recites in relevant part: "In a switched power supply: a rectifier adapted to be connected to the alternating current line; a boost converter connected to the output of said rectifier . . . ; and a control circuit . . . , said control circuit including a voltage error amplifier . . . , a *switching analog multiplier circuit* . . . , a current regulator amplifier . . . , and circuit means including a pulse-width modulator . . . ." '366 patent, col. 6, ll. 7-38 (emphasis added). Claim 2, also relevant to the prosecution history of the '366 patent, recites: "The combination defined in claim 1, in which said multiplier is a switching type, and in which said control circuit includes a timer and ramp signal generator for supplying clock signals to said switching multiplier and ramp signals to said pulse width modulator." *Id.*, at col. 6, ll. 39-43.

Pioneer's patent attorney, Keith Beecher, filed the application that matured into the '366 patent on May 12, 1986. The application included nine claims: claim 1 (the only

independent claim) and claims 2-9. Four of these original claims are relevant to the issue at hand:

> 4. The combination defined in claim 3, in which said control circuit *includes a multiplier* . . .
>
> 5. The combination defined in claim 4, and which includes . . . *circuit means* . . .
>
> 6. The combination defined in claim 5, in which said last-named *circuit means includes a pulse width modulator.*
>
> 7. The combination defined in claim 6, in which said *multiplier is a switching type*, and in which said control circuit includes a timer and ramp signal generator for supplying clock signals to said switching multiplier and ramp signals to said pulse width modulator.

(emphasis added).

The examiner rejected original claims 1-5 and 8-9 under 35 U.S.C. § 102(b) as anticipated by United States Patent No. 4,437,146 (the Carpenter reference). This reference did not disclose a switching multiplier circuit or a pulse-width modulator. The examiner then rejected original claim 6 as indefinite under 35 U.S.C. § 112, second paragraph, stating that "[t]he phrase 'said last-named circuit means' lacks proper antecedent basis in the claims." Claim 7 was dependent upon claim 6, and therefore was rejected on the same basis.

Appendix A

Pioneer did not dispute the rejection. Instead, it amended original claims 1 and 7, and cancelled original claims 2-6. The amendments to claim 1 imported claims 2-6, and had the relevant substantive effect of changing "circuit means" in original claim 5 to "circuit means including a pulse-width modulator" and changing the "multiplier" in original claim 4 to a "switching analog" multiplier circuit. In the remarks section of its amended application, Pioneer explained,

> It is believed clear that there is no showing in the cited Carpenter Patent 4,437,146 of the specific combination set forth in amended claim 1. It is also noted that amended claim 1 represents original claim 6 in independent form, and that claim 6 has been amended to overcome the objection raised under 35 USC § 112.

Despite twice stating that amended claim 1 incorporated original claims 2-6, Pioneer offered no explanation for its addition of the "switching analog" limitation not present in original claims 1-6.

As it stated in its remarks, Pioneer also amended original claim 7 (issued as final claim 2) to depend on amended claim 1, and to specify that the switching multiplier recited in claim 7 be a "pulse-width" type. On January 21, 1987, the examiner held a telephone interview with Beecher to propose an amendment deleting this "pulse-width" limitation. With this additional amendment, the examiner allowed the claims. The patent issued on June 30, 1987.

More than eight years later, on December 14, 1995, Pioneer filed suit against Micro Linear alleging infringement

of the '366 patent. In motions seeking interpretation of the claims, the parties requested the court to identify what equivalents of the "switching multiplier" limitation, if any, are barred by prosecution history estoppel. In support of its motion, Pioneer offered a declaration by Beecher that the reason he added the "switching" limitation to claim 1 was inadvertence. The court concluded that a "non-switching multiplier" is outside the permissible range of equivalents of this limitation because Pioneer narrowed claim 1 by adding limitations, including the "switching" limitation, to meet the objections of the Patent and Trademark Office as to the patentability of the claim in light of prior art. In response to this ruling, the parties stipulated that summary judgment of non- infringement be deemed granted to Micro Linear on the grounds that its accused products do not literally infringe any of the claims of the '366 patent, and that prosecution history estoppel bars Pioneer from asserting under the doctrine of equivalents that the accused products infringe claims containing the "switching analog multiplier circuit" limitation. The district court approved the stipulation and entered a final judgment of non-infringement.

Discussion

We review a district court's grant of summary judgment *de novo*. *See Vanmoor v. Wal-Mart Stores, Inc.*, 201 F.3d 1363, 1365, 53 USPQ2d 1377, 1378 (Fed. Cir. 2000) (citing *Petrolite Corp. v. Baker Hughes Inc.*, 96 F.3d 1423, 1425, 40 USPQ2d 1201, 1203 (Fed. Cir. 1996)). Prosecution history estoppel is a legal question subject to our *de novo* review. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1459-60, 46 USPQ2d 1169, 1177-78 (Fed. Cir. 1998) (en banc) (citations omitted).

Appendix A

An accused device that does not literally infringe a claim may still infringe under the doctrine of equivalents if each limitation of the claim is met in the accused device either literally or equivalently. *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40, 41 USPQ2d 1865, 1875 (1997). Prosecution history estoppel serves to limit the doctrine of equivalents by denying equivalency to a claim limitation whose scope was narrowed during prosecution for reasons related to patentability.

To decide whether a claim amendment gives rise to prosecution history estoppel, a court first must determine what claim limitations are alleged to be met by equivalents, and whether a patentee's amendment narrowed the literal scope of the claim. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558, 586, 56 USPQ2d 1865, 1886 (Fed. Cir. 2000) (en banc). Here, there is no dispute that Pioneer alleges that the "switching analog multiplier circuit" can be met by an equivalent, and that its amendment of claim 1 from a "multiplier" to a "switching analog" multiplier narrowed the literal scope of the claim.

A court next must examine the reason why an applicant amended a claim. *See Warner-Jenkinson*, 520 U.S. at 32-33, 41 USPQ2d at 1872-73; *Festo*, 234 F.3d at 565, 586, 56 USPQ2d at 1869-70, 1886. The burden is on the patent holder to establish that the reason for the amendment is not one related to patentability. *Warner-Jenkinson*, 520 U.S. at 33, 41 USPQ2d at 1873; *Festo*, 234 F.3d at 586, 56 USPQ2d at 1886. If the reason for the amendment is shown by the prosecution record to be unrelated to patentability, then "a court must consider that purpose in order to decide whether

an estoppel is precluded." *Warner-Jenkinson*, 520 U.S. at 40-41, 41 USPQ2d at 1876, *Festo*, 234 F.3d at 566, 56 USPQ2d at 1870. If the reason for the amendment is related to patentability, no equivalency is available as to the subject matter of the amendment. *See Warner-Jenkinson*, 520 U.S. at 33, 41 USPQ2d at 1873; *Festo*, 234 F.3d at 565-66, 569, 585, 56 USPQ2d at 1870, 1872, 1886. Where no explanation is established, a court should presume that the applicant had a substantial reason related to patentability for the amendment. *Id.* Prosecution history estoppel then bars the application of the doctrine of equivalents as to that limitation. *Id.*

We therefore examine the reason offered for the amendment. Pioneer contends it added the "switching" limitation through sheer inadvertence, unmotivated by any of the statutory requirements for a patent. To argue that its addition of the "switching" limitation was obviously in error, it relies on (1) the Beecher declaration, (2) the portion of its patent application stating that amended claim 1 incorporated claims 2-6 (which did not include the switching limitation), and (3) its assertion that reading amended claim 1 to include the "switching" limitation would be redundant of amended claim 2.

The argument is unpersuasive. First, we do not consider the Beecher declaration in determining the reason for the amendment to the claim. Only the "public record of the patent's prosecution, i.e., the patent's prosecution history" can be a basis for such a reason. *Festo*, 234 F.3d at 586, 56 USPQ2d at 1886. Second, the prosecution history does not show that the reason for the amendment of the term

"switching" was inadvertent. Although the Remarks section of the amendments indicates that Pioneer amended claim 1 to state claim 6 in independent form, it is equally possible that Pioneer changed the claim intentionally but inadvertently failed to update the Remarks. Finally, claim 2 is not redundant of claim 1 because it includes the additional limitations of a "timer and ramp signal generator . . . ." '366 patent, col. 6, ll. 41-43.

Even if we were to accept Pioneer's explanation for its amendment, inadvertence is not a sufficient reason to overcome the bar of prosecution history estoppel on the facts of this case. The public notice function of patents would be frustrated by forcing a patentee's competitors to guess whether a patent's claims were drafted and accepted in error. *See Festo*, 234 F.3d at 576-77, 56 USPQ2d at 1878 (emphasizing the definitional and public notice functions of patent claims and the reluctance to entertain speculative inquiries in areas of prosecution history estoppel). A patent applicant has many opportunities to remedy a drafting error in his claims. He may amend the claim during examination. *See Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1378, 55 USPQ2d 1279, 1282 (Fed. Cir. 2000) (citations omitted) ("[D]uring patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."). A patentee may also seek a reissue broadening the claim within the two years provided by 35 U.S.C. § 251 (1994).

Pioneer further argues that its amendment adding the "switching" limitation to claim 1 was not related to patentability because it was voluntary and was not offered to overcome any rejection, on prior art or otherwise. However, as *Festo* makes clear, the mere fact that an amendment is voluntary does not shield it from prosecution history estoppel. "Voluntary claim amendments are treated the same as other amendments. Therefore, a voluntary amendment that narrows the scope of a claim for a reason related to the statutory requirements for a patent will give rise to prosecution history estoppel as to the amended claim element." *Festo*, 234 F.3d at 568, 56 USPQ2d at 1871.

We therefore conclude that Pioneer has failed to meet its burden of establishing a reason unrelated to patentability for its amendment. Our own examination of the prosecution history convinces us that the amendment was made to avoid prior art, the classic basis for the application of prosecution history estoppel. *See Warner-Jenkinson*, 520 U.S. at 30-31; *see also Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 826, 49 USPQ2d 1865, 1871 (Fed. Cir. 1999) (citing *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1355, 48 USPQ2d 1674, 1677 (Fed. Cir. 1998)) (substantive changes to a claim that clearly respond to an examiner's rejection of that claim as unpatentable over prior art give rise to prosecution history estoppel).

The prosecution history shows that the examiner rejected claims 1-5 and 8-9 in light of the Carpenter reference, which disclosed a power supply containing a non-switching multiplier. Pioneer amended claim 1 to include a switching analog multiplier, which distinguished the '366 invention

over Carpenter. Therefore, the addition of this limitation was made to avoid prior art.

Pioneer attempts to avoid this conclusion by arguing that the "switching" limitation was unnecessary to the allowance of the claim. It contends that it added the pulse-width modulator, not the "switching" limitation, to distinguish its invention over Carpenter. According to Pioneer, the prosecution history indicates that amended claim 1 would have been allowed without the "switching" limitation because the examiner did not state in his initial rejection that he was rejecting original claim 6 (containing the pulse-width modulator limitation, but not the "switching" limitation) in view of prior art, but only for an improper antecedent basis reference under section 112, second paragraph.

We will not speculate whether any given amendment was material to the prosecution of the patent. *Festo*, 234 F.3d at 576-77, 56 USPQ2d at 1879 (citing *Hubbell v. United States*, 179 U.S. 77, 84 (1900)). Claim 1 is a combination claim. Its patentability rests on the novelty of the recited combination in amended claim 1, which includes the switching multiplier. *See id.* at 590-91, 56 USPQ2d at 1889-90. Moreover, the prosecution history shows that Pioneer recognized that the combination of elements was important to the allowance of the claims. In its remarks to the PTO, Pioneer stated, "[i]t is believed clear that there is no showing in the cited Carpenter Patent 4,437,146 of the *specific combination* set forth in amended claim 1." (emphasis added). It also stated that "[t]he amended claim 1 recites in precise details the various elements and components of the

overall *combination* of the invention . . . ." (emphasis added). Although it is not clear from the prosecution history whether the addition of the pulse-width modulator alone would suffice to overcome the Carpenter reference, the addition of the "switching" limitation is responsive to the examiner's anticipation rejection and assisted Pioneer in distinguishing its invention over prior art. *See Bai*, 160 F.3d at 1356, 48 USPQ2d at 1678-79 (refusing to speculate whether the examiner would have allowed a claim without the additional limitation where the limitation distinguished the invention over prior art). The prosecution history therefore demonstrates that the amendment was made for a reason related to patentability, to avoid prior art.

No scope of equivalents can be given to a claim limitation that was narrowed because of patentability concerns. *Festo*, 234 F.3d at 574, 56 USPQ2d at 1877. Therefore, Pioneer is estopped from arguing equivalents to the "switching analog multiplier circuit" limitation of the claims in the '366 patent. As the parties have recognized, the determination of these issues is dispositive. It is therefore unnecessary to reach the remainder of the issues briefed by the parties.

Conclusion

Accordingly, the judgment of the United States District Court for the Central District of California is affirmed.

AFFIRMED

APPENDIX B — STIPULATION FOR ENTRY OF ORDER GRANTING SUMMARY JUDGMENT OF NON-INFRINGEMENT; ORDER THEREON OF THE UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION DATED AND FILED SEPTEMBER 2, 1999 AND ENTERED SEPTEMBER 7, 1999

Marc E. Brown (SBN 89463)
Alan P. Block (SBN 143783)
George L. Fountain (SBN 182716)
OPPENHEIMER WOLFF & DONNELLY LLP
2029 Century Park East, Suite 3800
Los Angeles, California 90067
Tel: (310) 788-5000
Fax: (310) 277-1297

Henry J. Silberberg (SBN 68494)
Timothy Martin (SBN 150304)
BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP
1880 Century Park East, Suite 711
Los Angeles, California 90067
Tel: (310) 712-8300
Fax: (310) 712-8383

Attorneys for Plaintiff **PIONEER MAGNETICS, INC.**

Appendix B

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

Case No. CV 95-8307 LGB(BQRx)

PIONEER MAGNETICS, INC.,
a California corporation,

Plaintiff,

v.

MICRO LINEAR CORPORATION, a Delaware corporation; and DOES 1-10, inclusive,

Defendants.

STIPULATION FOR ENTRY OF ORDER GRANTING SUMMARY JUDGMENT OF NON-INFRINGEMENT; ORDER THEREON

This is a lawsuit for the alleged infringement of U.S. Patent No. 4,677,366 (the '366 patent). It includes a counterclaim for a declaratory judgment of non-infringement and invalidity of the '366 patent.

The '366 patent has four claims. Independent claim 1 recites, inter alia, a "switching analog multiplier circuit." Claims 2 – 4 depend upon Claim 1 and thus also require a "switching analog multiplier circuit."

Appendix B

Defendant contends that the accused products do not literally infringe the "switching analog multiplier circuit" element and that Plaintiff is barred from arguing infringement under the "doctrine of equivalents" because of the doctrine of "file wrapper estoppel." The Court in its order filed on November 12, 1998 concluded:

> "(1) the plain language of the patent and its prosecution history require that Claim One contains the limiting effect of the modifier 'switching'; (2) therefore the doctrine of file wrapper estoppel precludes the finding that a 'non-switching' multiplier is equivalent to a 'switching' multiplier." *Interpretation of U.S. Patent 4,677,366* at 29:3 – 29:9.

Pursuant to Local Rule 7.4.1, Defendant notified Plaintiff that Defendant intends to file a motion for summary judgment that none of the accused products literally infringe the "switching analog multiplier circuit" and Pioneer is barred by the Court's ruling from arguing that any of the accused devices infringe the '366 patent under the doctrine of equivalents for this element. As a consequence of the Court's ruling, Defendant asserts that it is entitled to summary judgment as a matter of law.

Plaintiff is willing to stipulate that such a motion be deemed to have been brought and granted, on condition that Defendant dismiss its counterclaim, that Plaintiff's right to appeal on all issues other than non-literal infringement of this claim element be preserved, and that an appealable judgment is entered forthwith.

Appendix B

NOW, THEREFORE, the parties stipulate as follows:

1. Defendant be deemed to have filed a motion for summary judgment of non-infringement and that this motion be deemed to have been granted on the ground that the accused products do not literally infringe the "switching analog multiplier circuit" element and on the already-determined ground that Plaintiff is barred by the doctrine of file wrapper estoppel from asserting infringement of this element under the doctrine of equivalents.

2. Plaintiff's right to appeal all issues in this case is preserved including, without limitation, all claim construction and file wrapper estoppel determinations made by the Court. Notwithstanding, Plaintiff shall not have the right to appeal the unopposed determination that the accused products do not literally infringe the "switching analog multiplier circuit" element.

3. Defendant's counterclaim is dismissed upon approval of this stipulation by the Court, but shall be reinstated automatically if the Court of Appeals substantially modifies the Court's ruling regarding the interpretation of the "switching analog multiplier" element, or the applicability of the doctrine of file wrapper estoppel to that element.

4. An appealable judgment of non-infringement in favor of defendant shall be entered forthwith.

Appendix B

IT IS SO STIPULATED.

Dated: Sept. 1, 1999

s/ [illegible]
Marc E. Brown
Alan P. Block
George L. Fountain
OPPENHEIMER WOLFF & DONNELLY LLP

Henry J. Silberberg
Timothy Martin
BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP

Attorneys for Plaintiff
PIONEER MAGNETICS, INC.

Dated: August 31, 1999

s/ Vera M. Elson
Michael A. Ladra
Vera M. Elson
Behrooz Shariati
Roger J. Chin
WILSON SONSINI GOODRICH & ROSATI

Attorneys for Defendant
MICRO LINEAR CORPORATION

Appendix B

ORDER

IT IS SO ORDERED.

Dated: September 2, 1999

s/ Lourdes G. Baird
Judge, United States District Court

APPENDIX C — FINAL JUDGMENT OF THE UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION DATED AND FILED OCTOBER 21, 1999 AND ENTERED OCTOBER 25, 1999

Marc E. Brown (SBN: 89463)
Alan P. Block (SBN: 143783)
George L. Fountain (SBN: 182716)
OPPENHEIMER WOLFF & DONNELLY LLP
2029 Century Park East, Suite 3800
Los Angeles, California 90067
(310) 788-5000
(310) 788-5100

Attorneys for Plaintiff PIONEER MAGNETICS, INC.

THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

Case No. CV 95-8307 LGB(BQRx)

Pioneer Magnetics, Inc., a California corporation,

Plaintiff,

v.

Micro Linear Corporation, a Delaware corporation; and DOES 1-10, inclusive,

Defendants.

Appendix C

FINAL JUDGMENT

Pursuant to the Stipulation for Entry of Order Granting Summary Judgment of Non-Infringement; Order Thereon (filed Sept. 2, 1999) and the Court's order approving this stipulation (set forth at the end of the stipulation) (entered Sept. 7, 1999), the Court hereby enters an appealable judgment of non-infringement in favor of defendant Micro Linear Corporation.

Dated: 10/21/99

s/ Lourdes G. Baird
United States District Court Judge

APPENDIX D — INTERPRETATION OF THE UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA OF U.S. PATENT 4,677,366 DATED AND FILED JULY 19, 1999

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

Case No. CV 95-8307 LGB (Ex)

PIONEER MAGNETICS, INC.,
a California corporation,

Plaintiff,

v.

MICRO LINEAR CORPORATION,
a Delaware corporation,

Defendant.

AND RELATED COUNTERCLAIMS.

INTERPRETATION OF U.S. PATENT 4,677,366.

I. INTRODUCTION.

This litigation arises out of the alleged infringement of a power supply circuitry patent, identified as United States Patent 4,677,366 (" '366"). Currently before the court is plaintiff's *Markman* motion requesting interpretation of the patent. The Court interprets the patent as described below.

Appendix D

II. FACTUAL AND PROCEDURAL BACKGROUND.

A. DESCRIPTION OF THE PATENTED INVENTION.

The patent at issue describes circuitry that intakes electrical currents at variant voltage levels and emits a power supply with a constant current voltage. This is not the first patented invention capable of transforming a current with variant voltage into a constant power supply, but it is distinguishable from prior art because it includes a "boost converter," which provides for a more reliable and consistent output voltage. '366 Patent, col. 1, lns. 5-68.

B. PROCEDURAL HISTORY.

On December 14, 1995, plaintiff Pioneer Magnetics filed a complaint against Micro Linear for patent infringement. The complaint asks for relief from the alleged infringement of United States Patent '366 by defendant's use, sale, and manufacture of "unity power factor" power supplies. On February 14, 1996, defendant answered the complaint, asserting several affirmative defenses, and a counterclaim for declaratory relief. Plaintiff answered the counterclaim with several affirmative defenses on March 7, 1996.

Between October 1996 and May 1998, the parties filed several motions for summary judgment involving the asserted affirmative defenses. Denying all motions but one, the Court granted defendant's motion for summary adjudication as to all claims by plaintiff based on infringing activities that occurred before December 14, 1989.

Appendix D

On November 12, 1998, the court issued an order interpreting two terms in the '366 patent. It interpreted Claim One's "switching analog multiplier circuit" as follows: (1) the plain language of the patent and its prosecution history require that Claim One contain the limiting effect of the modifier "switching"; (2) the doctrine of file wrapper estoppel precludes the finding that a "non-switching multiplier" is equivalent to a "switching multiplier"; and (3) the phrase does not constitute means-plus-function language. The Court also interpreted Claim One's "circuit means" to constitute means-plus-function language. Currently before the Court is a second *Markman* motion, which requests further interpretation of the patent.

C. LANGUAGE OF THE PATENT.

United States Patent '366 describes four claims, one of which is independent and three of which are dependent. The parties only dispute terms in Claim One. The terms that are interpreted in this order are underlined.

> 1. In a switch power supply: a rectifier adapted to be connected to the *alternating current line*; a boost converter connected to the output of said rectifier, said converter including an input circuit having a series-connected inductance coil and an output circuit having a shunt-connected storage capacitor, and further including a power switch connected between the inductance coil and the storage capacitor; and a *control circuit* connected to said power switch for providing a switching control signal for said converter having a current

reference which tracks the waveform of the *alternating current line* voltage to cause the power supply to exhibit *unity power factor* to the *alternating current line*, said *control circuit* including a voltage error amplifier connected to the output of said converter and to a source of *reference voltage* for producing an output which is a *function* of the difference between the output voltage of the converter and the *reference voltage* from the source, a switching analog multiplier circuit connected to the output of said voltage error amplifier and to the output of said rectifier to produce an output which is *proportional* to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared, a current regulator amplifier connected to the converter and to the multiplier and *responsive* to a voltage representing the current flow in the converter and to the output of the multiplier for producing a current error signal, and circuit means including a pulse-width modulator connected to said current regulator amplifier and responsive to said current error signal therefrom for introducing said switching control signal to said power switch.

'366 Patent, col. 6, lns. 7-47 (emphasis added).

Appendix D

III. INTERPRETATION OF PATENT '366.

A. LEGAL STANDARD FOR PATENT INTERPRETATION.

In *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), the Supreme Court held that the interpretation of a patent claim — the portion of the patent document that defines the scope of the patentee's rights — is a matter of law exclusively within the province of the court and is not a factual question for the jury. *See id.* at 372. The *Markman* decision suggested that a trial court could consider various types of evidence when interpreting a patent, including expert testimony. *See id.* at 388-90. Shortly after the Supreme Court handed down *Markman*, the Federal Circuit, in *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996), expanded on the court's dicta concerning evidence available to a trial court in interpreting patent claims. *See id.* at 1581-83. The Federal Circuit hold that if intrinsic evidence can, by itself, resolve ambiguity in a patent term, then a court may not rely on extrinsic evidence, such as expert testimony, to construe the term. *See id.* at 1583. A trial court may only use extrinsic evidence when intrinsic evidence fails to illuminate the meaning of the disputed claim. *See id.* Moreover, extrinsic evidence cannot broaden the reach of a claim or contradict explicit language. *See id.*

The Federal Circuit detailed a hierarchy of specific types of evidence that a court may consider. When interpreting a patent, a trial court must first look at the language of the claim itself. *See id.* at 1582. Court should typically construe terms by their common, customary meaning, but a patentee

is allowed to define her own terms in the specification section of the patent or in the prosecution history. *See id.* Therefore, courts must always review the specification, which, when setting forth an embodiment of the invention, frequently provides explicit definitions of the claim terms. *See id.* The language in the specification is dispositive, and "it is the single best guide to the meaning of the dispute term." *Id.* In addition, a court may consider the prosecution history of the patent as evidence of term meaning. *See id.* This history contains the complete record of all the filings and examinations before the Patent and Trademark Office, including representations made by the applicant regarding the significance of claims and terms. *See id.* The history also limits the interpretation of terms by recording the exclusion of any term definition disclaimed during the prosecution. *See id.*

Only when intrinsic evidence fails to resolve ambiguity in a disputed claim term may a court rely on extrinsic evidence. *See id.* at 1583. The policy rationale supporting this evidentiary limitation is that prospective patentees must have access to public records concerning the patent to "design around" a prior art. *Id.* If expert testimony or other extrinsic evidence were permitted to alter the record, then this public benefit would be frustrated. *See id.* Accordingly, a court can only examine extrinsic evidence if the evidence does not contradict the claim language, the specification, or the prosecution history but instead supplements it. *See id.* at 1584-85.

Appendix D

B. DISPUTED TERMS.

1. "Alternating Current Line."

The parties dispute the meaning of the term "alternating current line." Claim One uses the term three times:

> In a switch power supply: a rectifier adapted to be connected to the *alternating current line*; . . . and a control circuit connected to said power switch for providing a switching control signal for said converter having a current reference which tracks the waveform of the *alternating current line* voltage to cause the power supply to exhibit unity power factor to the *alternating current line* . . . .

'366 Patent, col. 6, lns. 7-8, 14-19 (emphasis added).

The parties dispute whether the alternating current line carries a "current" or a "voltage." The *Webster's II: New Riverside University Dictionary* defines "current" as "a flow of electric charge" or "[t]he amount of electric charge flowing past a specified circuit point per unit time." *Webster's II: New Riverside University Dictionary* 337 (1988). It defines "voltage" as an "[e]lectromotive force or potential difference." *Webster's II: New Riverside University Dictionary* 1294 (1988). Both parties analogize a "current" to water flow and "voltage" to water pressure, which the foregoing dictionary definitions support. (Motion, 1:9-20; Opposition, 1:15-16).

Appendix D

Plaintiff argues that a line cannot carry a voltage because that would be analogous to stating that a "hose carries a pressure." (Motion, 1:13-18). Indeed, in its opposition, defendant concedes that the dispute is merely a semantic distinction and it agrees that a line carries "a current at a given voltage." (Opposition, 1:11-18). Because no real dispute exists between the parties concerning whether the line carries a current or a voltage, the Court interprets the alternating current line as carrying a current at a given voltage.

The parties also dispute whether the alternating current line carries currents only displaying sinusoidal waveforms or sinusoidal and other types of waveforms. Under *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996), a court must first examine the language of the patent to determine the common, customary meaning of the term in dispute. *See id.* at 1582. Here, the patent does not explicitly define the term "alternating current line" or explain the types of waveforms that the line carries. Moreover, the specification does not define "alternating current line" or address waveforms. *See id.* (a court may examine the specification for a definition if the patent claims do not provide one).

Because the patent and its specification do not contain an explicit definition of "alternating current line," the Court finds that the patentee intended the term to carry its customary usage. The *Encyclopedia of Electronics*, which was published just one year before the filing of the patent application, defines the "square waveform" as a "special form of alternating current." *Encyclopedia of Electronics* 786

(1985). Similarly, the *Illustrated Dictionary of Electronics* defines the "square and sawtooth waveforms" as alternating currents. *See Illustrated Dictionary of Electronics* 598, 638 (1997). Therefore, the common and customary definition of "alternating current line" includes currents not limited to the sinusoidal waveform. Accordingly, the Court interprets the term to include currents not limited to the sinusoidal waveform.

2. "Control Circuit."

The parties also disagree over the function of the "control circuit." Claim One of the patent states that the invention includes "a *control circuit* connected to said power switch for providing a switching control signal." '366 Patent, col. 6, lns. 13-16 (emphasis added). Specifically, the parties dispute whether, (1) the control circuit must deliver an "output" signal; (2) whether the control circuit must deliver the output to the power switch; and (3) whether "V_{gate}" is an example of such an output signal.[1]

The plain language of the clause at issue provides that the control circuit is connected to the power switch for the purpose of emitting a signal to it. The word "providing" in Claim One clearly demonstrates that the control circuit delivers an output to the power switch. This interpretation is supported by the specification's embodiment of the

1. Neither plaintiff or defendant provide a definition for the word "output." The *Webster II: New Riverside University Dictionary* defines an "output" as "[t]he power, energy, or work produced by a system." *Webster II: New Riverside University Dictionary* 835 (1985).

invention, which describes Figure Four as "a block diagram of the control circuit which supplies the signal V_{gate} to FET 50." '366 Patent, Col. 2, lns. 66-67. The specification defines "V_{gate}" as a control signal and "FET 50" as a power switch. '366 Patent, col. 2. lns. 47-48, 50-51. The plain meaning of this embodiment language is that the control circuit delivers an output signal to the power switch. Therefore, given Claim One's and the specification's unambiguous language, the Court interprets the patent to require the control circuit to deliver an output signal to the power switch.

The parties also dispute whether "V_{gate}" is an example of such an output signal. The symbol "V_{gate}" does not appear anywhere in the claim language but only in the specification's embodiment. United States Code, Title 35, Section 112 explains the significance of specification language. It states that the, "specification shall contain a written description of the invention, and of the manner and process of making or using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. . . ." 35 U.S.C. § 112. Stated in other terms, the specification must include a detailed embodiment of how to implement the patent claims. Therefore, when '366's embodiment references "V_{gate}," it does so in the context of communicating one example of implementing the patent claims.

Turning to the specific use of "V_{gate}," the embodiment states that the "control circuit . . . supplies the signal V_{gate} to FET 50." '366 Patent, col. 2, lns. 66-67. The embodiment defines "V_{gate}" as a control signal and "FET 50" as a power

switch. '366 Patent, col. 2, lns. 47-48, 50-51. Therefore, the embodiment is unambiguous that "V_{gate}" is an example of an output signal from the control circuit to the power switch.

3. "Unity Power Factor."

In its opening papers, plaintiff argues that (1) the "unity power factor" must occur at the alternating current line, rather than the rectified line, and (2) the patent requires that the "unity power factor" only be "substantially" performed. In its opposition, defendant concedes the first point. (Opposition, 3:17-28). However, it argues that the Court cannot adopt the "substantially" performed language because "the term 'substantially' is a term of art suggestive of a broader range of equivalents than the range permitted under the Doctrine of Equivalents." (Opposition, 3:27-28). Instead, it argues that the Court should adopt an interpretation that the unity power factor "need not be precisely performed." Defendant provides no authority for its position that the word "substantially" implicates the Doctrine of Equivalents.

The Court finds that the parties are not substantively in disagreement over the "unity power factor" term. Therefore, it interprets Claim One as requiring that the unity power factor be "essentially" performed.

4. The Voltage Error Amplifier's Output Function.

The parties dispute how to calculate the voltage error amplifier's output voltage. This dispute requires the Court to interpret Claim One's "function" language: Claim One provides for a control circuit that includes,

> a voltage error amplifier connected to the output of said [boost] converter and to a source of reference voltage for producing an output which is a *function* of the difference between the output voltage of the converter and the reference voltage from the source, a switching analog multiplier circuit connected to the output of said voltage error amplifier and to the output of said rectifier to produce an output which is proportional to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared. . . .

'366 Patent, col. 6, lns. 20-30 (emphasis added). The parties specifically dispute whether the output produced by the amplifier is a "proportional function" of the difference between the boost converter's output voltage and the source voltage, or whether it is a "proportional or some other type of function" of the aforementioned difference.

Claim One uses the word "function" without modification: The voltage error amplifier "produc[es] an output which is a function of the difference between the output voltage of the converter and the reference voltage from the source." '366 Patent, col. 6, lns. 20-25. The *Webster's II: New Riverside University Dictionary* defines the mathematical use of the word "function" as: (1) "[a] variable so related to another that for each value assumed by one there is a value determined for the other"; and (2) "[a] rule of correspondence between two sets such that there is a unique element in one set assigned to each element in the other." *Webster's II: New Riverside University Dictionary*

512 (1988). Taking the language of the claim and these definitions together, the plain meaning of the clause provides that the amplifier's output voltage corresponds to the difference between the boost converter output voltage and the source voltage.

This reading of the clause, however, does not resolve the issue posed by the parties. The Court employs a numerical example to illustrate the dispute. Under defendant's reading of the clause, if the output difference is two output units, the "function" requires that the amplifier also produce two output units. Under plaintiff's reading, the function is not limited to proportionality. For example, if the difference is two, and the function is the square of the difference, then the output would be four. Both these scenarios fit within the common definition of "function" because under both of them the output voltage corresponds and depends on the difference between the boost converter output voltage and the source voltage.

Although the clause itself does not explain the scope of the word "function," the clause immediately succeeding it clarifies its meaning. This clause describes the switching analog multiplier as producing "an output which is *proportional* to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared." '366 Patent, col. 6, lns. 25-30 (emphasis added). In this clause, the patentee explicitly stated that the output is proportional. The clear import of the contrasting use of "function" in the preceding clause and "proportional" in this clause is that the patentee intended the voltage error amplifier's output merely to correspond to

an output difference, while he intended the switching analog multiplier's output not only to correspond to an output calculation but also to do so proportionally. If the patentee intended to limit the voltage error amplifier to a proportional function, he could have written in this explicit limitation as he did with the switching analog multiplier. *See Minnesota Mining & Mfg. v. Johnson & Johnson Orthopedics*, 976 F.2d 1559, 1566 (Fed. Cir. 1992) (holding that a court cannot read limitations into a claim that were unintended by the inventor). In short, the Court interprets the voltage error amplifier's output as relying on a function of the difference between other outputs, but the patent does not require the function to be proportional.

5. "Reference Voltage."

The parties dispute whether the reference voltage has a fixed, predetermined value or whether it is an undetermined function of other outputs. Claim One uses the term "reference voltage" twice. The invention contains,

> a control circuit including a voltage error amplifier connected to the output of said converter and to a source of *reference voltage* for producing an output which is a function of the difference between the output voltage of the converter and the *reference voltage* from the source. . . .

'366 Patent, col. 6, lns. 20-25 (emphasis added).

Claim One clearly distinguishes between (1) outputs that depend on functions of other outputs, and (2) outputs that

are independent of other output functions. For example, the voltage error amplifier depends on the difference between the boost convertor output and the reference voltage. Similarly, the switching analog multiplier's output depends on the voltage error amplifier's output multiplied by the instantaneous line voltage and divided by the RMS line voltage squared. In contrast, Claim One merely references a "source of reference voltage." It does not discuss the reference voltage as depending on the function of other outputs but merely references it as an existing voltage. The import of this contrast is that the reference voltage is an input that is independent of other inputs or outputs within the patent. Therefore, the Court interprets the reference voltage as a "fixed" voltage.

6. The Switching Analog Multiplier's Proportional Output.

In its opening papers, plaintiff argues that the switching analog multiplier's output does not have to be exactly proportional to the outputs on which it depends but merely "substantially" proportional. The relevant language in Claim One states that the invention includes a,

> a switching analog multiplier circuit connected to the output of said voltage error amplifier and to the output of said rectifier to produce an output which is *proportional* to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared. . . .

'336 Patent, col. 6, lns. 25-30 (emphasis added). In its opposition, defendant agrees that the proportionality does not have to be exact. (Opposition, 5:10-24). However, defendant objects to the use of the word "substantially" modifying "proportional" because "substantially" is a term of art used in the Doctrine of Equivalents. Defendant provides no authority for this proposition. Because the Court finds that there is no real dispute between the parties, the Court interprets Claim One to require the multiplier to produce an output that is "essentially" proportional to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared.

7. The Conditions Under Which the Patent Must Perform.

Plaintiff alleges that the '366 patent is designed to function optimally with an input voltage of eighty to 270 volts. (Reply. 5:10-14). The parties dispute whether the patent must provide a constant output voltage only if the input voltage falls within the optimal range, or whether it must also emit a constant output voltage when the input voltage falls out of the range.

The patent does not address "normal" or "optimal" operating conditions. In fact, it does not state that the invention operates optimally with an input voltage range of eighty to 270 volts. Similarly, neither the specification or the "background of the invention" section discusses voltage ranges within the which the invention operates.

If the Court were to interpret Claim One to require a "normal" voltage range, the Court would be inserting a

limitation into the patent language. Courts interpreting patent claims may not add extraneous limitations to claim language from extrinsic evidence. *See E. I. Du Pont de Nemours v. Phillips Petroleum*, 849 F.2d 1430, 1433 (Fed. Cir. 1988). The policy rationale supporting this rule is that prospective patentees must have access to public records to "design around" prior art. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). If extrinsic evidence were permitted to alter the record, then public access to the patent's full requirements and limitations would be frustrated. *See id.* Because the instant patent does not discuss "normal" or "abnormal" voltage inputs, the Court declines to read such a limitation into the patent claims. The Court recognizes that the invention, in practice, may operate more efficiently under certain conditions. Nevertheless, the patent's plain language does not require that particular voltage ranges be met to implement the invention. In summary, the Court interprets the patent as not requiring a particular voltage input.

8. The Current Regulator Amplifier's Response to Signals.

The parties dispute how the current regulator amplifier is responsive to other signals within the invention. The pertinent claim language states that the patent includes, "a current regulator amplifier connected to the converter and to the multiplier and *responsive* to a voltage representing the current flow in the converter and to the output of the multiplier for producing a current error signal. . . ." '366 Patent, col. 6, lns. 30-34 (emphasis added). Specifically, the parties dispute whether the response must be "proportional" to the current flow voltage and the multiplier output or

whether the response may be "proportional or some other function" of the voltage and output.

The plain meaning of the clause at issue is that the amplifier reacts to a specified voltage and output to produce a signal. Claim One uses the word "responsive" without modification. Therefore, the patent claims do not require the signal to reflect a set mathematical relation to the specified voltage and output. Moreover, as discussed in the section interpreting the word "function," the patentee used the word "proportional" in other clauses of the patent when he intended an output to relate proportionally to other outputs. If the patentee intended to limit the amplifier's signal to a proportional response, he could have written in this explicit limitation as he did in other areas of the patent. *See Minnesota Mining & Mfg. v. Johnson & Johnson Orthopedics*, 976 F.2d 1559, 1566 (Fed. Cir. 1992). In short, the Court interprets the amplifier's signal as responsive to a specified output and voltage, but the patent does not require that the response be proportional.

IV. CONCLUSION.

The Court INTERPRETS '366 as follows:

1) The alternating current line carries a current at a given voltage. The alternating current line may carry currents that display a waveform other than the sinusoidal waveform.

2) The control circuit delivers an output signal to the power switch. "V_{gate}" is an example of an output signal from the control circuit to the power switch.

3) The "unity power factor" must occur at the alternating current line. The unity power factor only needs to be "essentially" performed.

4) The voltage error amplifier's output relies on a function of the difference between other outputs, but the patent does not require the function to be proportional.

5) The reference voltage is a "fixed" voltage.

6) The switching analog multiplier produces an output that is "essentially" proportional to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared.

7) The patent does not require a particular voltage input.

8) The current regulator amplifier's signal is responsive to a specified output and voltage, but the patent does not require that the response be proportional.

IT IS SO ORDERED.

DATED: July 19, 1999

s/ Lourdes G. Baird
LOURDES G. BAIRD
United States District Judge

APPENDIX E — THE 4,677,366 PATENT

[Omitted here but submitted separately as Lodging]

APPENDIX F — EXCERPTS FROM FILE HISTORY OF U.S. PATENT 4,677,366

We claim:

1. In a switched power supply: a rectifier adapted to be connected to the alternating current line; a converter connected to the output of said rectifier, said converter including an input circuit having a series-connected inductance coil and an output circuit having a shunt-connected storage capacitor, and further including a power switch connected between the inductance coil and the storage capacitor; and a control circuit connected to said power switch for providing a switching control signal for said converter having a current reference tracking the waveform of the alternating current line voltage to cause the power supply to exhibit unity power factor to the alternating current line.

2. The combination defined in claim 1, in which said converter is connected as a boost converter.

3. The combination defined in claim 1, in which said control circuit includes a voltage error amplifier connected to the output of said converter and to a source of reference voltage for producing an output which is a function of the difference between the output voltage of the converter and the reference voltage from the source.

4. The combination defined in claim 3, in which said control circuit includes a multiplier connected to the output of said voltage error amplifier and to the output of said rectifier to produce an output which is proportional to the output of said voltage error amplifier multiplied by the

instantaneous line voltage and divided by the RMS line voltage squared.

5. The combination defined in claim 4, and which includes a current regulator amplifier connected to the converter and to the multiplier and responsive to a voltage representing the current flow in the converter and to the output of the multiplier for producing a current error signal; and circuit means connected to said current regulator amplifier and responsive to said current error signal therefrom for introducing said switching control signal to said power switch.

6. The combination defined in claim 5, in which said last-named circuit means includes a pulse width modulator.

7. The combination defined in claim 6, in which said multiplier is a switching type, and in which said control circuit includes a timer and ramp signal generator for supplying clock signals to said switching multiplier and ramp signals to said pulse width modulator.

8. The combination defined in claim 1, in which said power switch comprises a field effect transistor.

9. The combination defined in claim 1, in which said rectifier comprises a full-wave diode rectifier.

Appendix F

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/862,593	05/12/86	WILKINSON B	K-30Z0

KEITH D. BEECHER
2001 WILSHIRE BLVD.
SUITE 500
SANTA MONICA, CA 90403

EXAMINER
HOFF-M

ART UNIT
212

PAPER NUMBER
2

DATE MAILED: 09/24/86

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS
AND TRADEMARKS

Appendix F

☒ This application has been examined.

* * *

A shortened statutory period for response to this action is set to expire 3 month(s) from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☒ Notice of References Cited by Examiner, PTO-892.

2. ☒ Notice of Patent Drawing, PTO-948.

* * *

Part II SUMMARY OF ACTION

1. ☒ Claims 1-9 are pending in the application.

* * *

4. ☒ Claims 1-9 are rejected.

* * *

7. ☒ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.

* * *

Appendix F

Serial No. 862,593
Art Unit 212

1. Applicant is reminded of the proper language and format of an Abstract of the Disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said", should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Applicant is required to revise the Abstract to comply with the 50 word minimum, and also to state the technical problem associated with Applicant's invention and his solution to the problem.

2. The disclosure is objected to because of the following informalities:

Page 2, line 11, ";" should be deleted.

Appropriate correction of the disclosure is required.

Appendix F

3. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "said last-named circuit means" lacks proper antecedent basis in the claims. Claim 7 incorporates claim 6's language.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless —
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 8, and 9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Carpenter.

6. Applicant is required to furnish the Office with a copy of the article by Ned Mohan et al. cited on page 4 of the specification.

7. Applicants' Information Disclosure Statement, since it does not include a copy of the cited patents and a brief explanation of the relevance of each one, is not in compliance with 37 CFR 1.98; therefore, the references have not been considered.

Appendix F

8. Any inquiry concerning this communication should be directed to Marc S. Hoff at telephone number 703-557-7657.

Hoff/dc MSH

703/557/7657

9/15/86

s/ P. Salce
PATRICK R. SALCE
SUPERVISORY PATENT
EXAMINER
ART UNIT 212

Appendix F

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ART UNIT 212

In re application of
BRUCE L. WILKINSON et al
Serial No. 862,593
Filed: May 12, 1986
For: UNITY POWER FACTOR POWER SUPPLY
Examiner: M. Hoff

AMENDMENT

Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

Responsive to the Office Action of September 24, 1986, please amend the above-entitled application as follows:

IN THE SPECIFICATION:

Page 1, line 13, after "waveform" but before the period. insert —, thereby to minimize the required input current for a given power output —.

Page 2, line 11, cancel the semicolon (;).

Appendix F

IN THE CLAIMS:

Cancel claims 2, 3, 4, 5 and 6. Rewrite claims 1 and 7. Retain claims 8 and 9.

1. (Amended) In a switched power supply: a rectifier adapted to be connected to the alternating current line; a *boost* converter connected to the output of said rectifier, said converter including an input circuit having a series-connected inductance coil and an output circuit having a shunt-connected storage capacitor, and further including a power switch connected between the inductance coil and the storage capacitor; and a control circuit connected to said power switch for providing a switching control signal for said converter having a current reference [tracking] *which tracks* the waveform of the alternating current line voltage to cause the power supply to exhibit unity power factor to the alternating current line, *said control circuit including a voltage error amplifier connected to the output of said converter and to a source of reference voltage for producing an output which is a function of the difference between the output voltage of the converter and the reference voltage from the source, a switching analog multiplier circuit connected to the output of said voltage error amplifier and to the output of said rectifier to produce an output which is proportional to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared, a current regulator amplifier connected to the converter and to the multiplier and responsive to a voltage representing the current flow in the converter and to the output of the multiplier for producing a current error signal, and circuit means including a*

Appendix F

pulse-width modulator connected to said current regulator amplifier and responsive to said current error signal therefrom for introducing said switching control signal to said power switch.

2. (Amended) The combination defined in claim [6] *1*, in which said *pulse-width* multiplier is a switching type, and in which said control circuit includes a timer and ramp signal generator for supplying clock signals to said switching multiplier and ramp signals to said pulse width modulator.

REMARKS

The Abstract has been revised to comply with the Examiner's requirements. The error on Page 2, line 11 has been corrected.

Claims 2-6 have been cancelled, and the subject matter of those claims has been incorporated into amended claim 1.

Claim 7 has been amended so that it may depend on amended claim 1, and also in order that the multiplier recited in claim 7 may be specified as a "pulse-width" type.

The amended claim 1 recites in precise details the various elements and components of the overall combination of the invention which results in the switched power supply having the desired characteristics representing the intendments and purpose of the present invention.

It is believed clear that there is no showing in the cited Carpenter Patent 4,437,146 of the specific combination set

forth in amended claim 1. It is also noted that amended claim 1 represents original claim 6 in independent form, and that claim 6 has been amended to overcome the objection raised under 35 USC 112. Accordingly, amended claim 1 is believed to be allowable.

Amended claim 7 and claims 8 and 9 are all dependent on amended claim 1, and are likewise believed to be allowable.

Pursuant to the Examiner's request, a copy of the Mohan et al article is submitted.

Appropriate corrections will be made to FIGURES 1 and 7 so that the heading space requirements will be fulfilled, upon the allowance of this application.

Respectfully submitted,

s/ Keith D. Beecher
Keith D. Beecher
Attorney for Applicants
(Reg. #16,344)

Santa Monica, California 90403

October 30, 1986

Area 213
829-4525

Supreme Court, U.S.
FILED
JUN 25 2001
OFFICE OF THE CLERK

No. 00-1765

In The

Supreme Court of the United States

PIONEER MAGNETICS, INC.,

Petitioner,

v.

MICRO LINEAR CORPORATION,

Respondent.

On Petition For Writ Of Certiorari To The United States Court Of Appeals For The Federal Circuit

BRIEF IN OPPOSITION

VERA M. ELSON
(Counsel of Record)
MICHAEL BARCLAY
ROGER J. CHIN
JOSH A. GOLDFOOT
WILSON SONSINI GOODRICH & ROSATI
650 Page Mill Road
Palo Alto, California 94304
Telephone: (650) 493-9300

Counsel for Respondent Micro Linear Corporation

COCKLE LAW BRIEF PRINTING CO., (800) 225-6964
OR CALL COLLECT (402) 342-2831

QUESTION PRESENTED

1. Whether the Federal Circuit properly concluded in the alternative that a claim of inadvertence by a patent attorney, first raised during litigation, did not defeat application of prosecution history estoppel on the facts of this case, where the public patent prosecution history record shows that an amendment was made in response to a prior art rejection.

CORPORATE DISCLOSURE STATEMENT

No parent or publicly held company owns 10% or more of the stock of Respondent Micro Linear Corporation.

TABLE OF CONTENTS

	Page
QUESTION PRESENTED	i
CORPORATE DISCLOSURE STATEMENT	ii
TABLE OF AUTHORITIES	v
TABLE OF CONVENTIONS	viii
OPINIONS BELOW	1
STATEMENT OF THE CASE	1
I. The Prosecution History of the '366 Patent	4
II. The Background of the Litigation	5
THE WRIT SHOULD BE DENIED	8
I. The Federal Circuit Correctly Applied Classic Prosecution History Estoppel Under Well-Established Principles	8
A. The Federal Circuit Properly Applied this Court's Precedents Holding that Amendments to Overcome the Prior Art Result in Prosecution History Estoppel	9
B. The Federal Circuit Did Not Reversibly Err in Determining that the Alleged Evidence of Inadvertence Did Not Prevent the Application of Prosecution History Estoppel	12
II. This Court Should Not Review Obiter Dicta Statements of the Federal Circuit Concerning Inadvertent Amendments	14
A. Review is Not Warranted Because the Questions Presented are Directed to an Alternative Ruling Not Essential to Determination of the Case Below	14

TABLE OF CONTENTS – Continued

Page

B. A Claim of Inadvertence Does Not Effect a Wholesale Exemption from the Doctrine of Prosecution History Estoppel 17

III. The Effect of "Inadvertent" Amendment of Patent Claims Lacks Sufficient Importance to Warrant Review 18

A. "Inadvertent" Amendments That May Result in Prosecution History Estoppel are Infrequent and of Negligible Importance to the Patent System 19

B. Reissue Proceedings Already Afford Adequate Remedy for "Inadvertent" Amendment by Patentees 20

IV. This Court's Recent Grant of Certiorari in *Festo* is Immaterial to Pioneer's Petition 20

CONCLUSION 23

APPENDIX 1a

Interpretation of U.S. Patent 4,677,366, United States District Court for the Central District of California, filed November 12, 1998 ..... 1a

Unofficial Transcript of Oral Argument Before the Federal Circuit (Oct. 5, 2000) 27a

TABLE OF AUTHORITIES

Page

CASES

Burr v. Duryee,
68 U.S. (1 Wall.) 531 (1863) 19

Computing Scale Co. of Am. v. Automatic Scale Co.,
204 U.S. 609 (1907) 4, 9

ETSI Pipeline Project v. Missouri,
484 U.S. 495 (1988) 16

Exhibit Supply Co. v. Ace Patents Corp.,
315 U.S. 126 (1942) 10

Hubbell v. United States,
179 U.S. 77 (1900) 10, 17

Keystone Bridge Co. v Phoenix Iron Co.,
95 U.S. 274 (1877) 10, 20

Link v. Wabash R.R. Co.,
370 U.S. 626 (1962) 18

Loral Fairchild Corp. v. Sony Corp.,
181 F.3d 1313 (Fed. Cir. 1999)..... 12

Markman v. Westview Instruments, Inc.,
517 U.S. 370 (1996) 13, 17

In re McGrew,
120 F.3d 1236 (Fed. Cir. 1997)..... 15

Merrill v. Yeomans,
94 U.S. 568 (1876) 17

Miller v. Brass Co.,
104 U.S. 350 (1881) 13

Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co.,
152 U.S. 425 (1894) 4, 8

TABLE OF AUTHORITIES – Continued

Page

Rice v. Sioux City Memorial Park Cemetery,
349 U.S. 70 (1955) 19

Sage Prods., Inc. v. Devon Indus., Inc.,
126 F.3d 1420 (Fed. Cir. 1997) 12

Schriber-Schroth Co. v. Cleveland Trust Co.,
311 U.S. 211 (1940) 22

Senmed, Inc. v. Richard-Allan Med. Indus., Inc.,
888 F.2d 815 (Fed. Cir. 1989) 13

Sextant Avionique, S.A. v. Analog Devices, Inc.,
172 F.3d 817 (Fed. Cir. 1999) 12

Smith v. Butler,
366 U.S. 161 (1961) 16

Stickel v. United States,
76 S. Ct. 1067 (1956) 15

United States v. Crawley,
837 F.2d 291 (7th Cir. 1988) 15

Warner-Jenkinson Co. v. Hilton Davis Chem. Co.,
520 U.S. 17 (1997) 11, 12, 14, 18

White v. Dunbar,
119 U.S. 47 (1886) 17

STATUTES

35 U.S.C. § 102(b) 8

35 U.S.C. § 112 12

35 U.S.C. § 251 ..... 6, 20

TABLE OF AUTHORITIES – Continued

Page

RULES AND REGULATIONS

Manual Pat. Examining Proc. § 707.07(j) 11

Sup. Ct. R. 10 12

Sup. Ct. R. 10(c) 8

Sup. Ct. R. 14.1(a) 21

TREATISES

A. Walker, Patent Laws § 189 (3d ed. 1895) 13

TABLE OF CONVENTIONS

Micro Linear	Respondent Micro Linear Corporation
Pioneer	Petitioner Pioneer Magnetics, Inc.
Unitrode	Unitrode Integrated Circuits Corporation
Pet.	Petitioner Pioneer Magnetics, Inc.'s Petition for a Writ of Certiorari
Pet. App.	Appendix to the Petition
Opp. App.	Appendix to this Brief in Opposition
'366 patent	U.S. Patent No. 4,677,366, reproduced in the "Lodging" filed separately by Petitioner on May 23, 2001
Carpenter	U.S. Patent No. 4,437,146, cited during prosecution of the '366 patent
PTO	United States Patent and Trademark Office
A___	The indicated page of the Joint Appendix before the Court of Appeals for the Federal Circuit below

BRIEF IN OPPOSITION

Respondent Micro Linear Corporation respectfully submits its Brief in Opposition to the petition for a writ of certiorari to the United States Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The opinion of the Court of Appeals (Pet. App. 1a-11a) is reported at 238 F.3d 1341. The District Court's stipulated summary judgment order of noninfringement (Pet. App. 12a-17a) is unreported. The District Court's claim construction ruling on the "switching analog multiplier circuit" claim language presently at issue (Opp. App. 1a-26a) is unreported and did not appear in the Appendix to the Petition. It is reprinted in the Appendix herein.

STATEMENT OF THE CASE

This is a patent case that involves the routine application of prosecution history estoppel – a doctrine consistently recognized and applied by this Court for over a century and by the Federal Circuit since its inception. There is no split among the Circuits, no unresolved question of federal law, and no conflict with decisions of this Court. Rather, this case concerns the unremarkable notion that prosecution history estoppel applies when "the amendment was made [during patent prosecution] to avoid prior art, the classic basis for the application of prosecution history estoppel." Pet. App. 9a. Thus, the

disposition of this case is *not* affected by this Court's recent grant of certiorari in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, Docket No. 00-1543. The application of classic prosecution history estoppel is unrelated to the questions presented in *Festo*, and therefore, cannot be affected by its outcome. *See infra* section IV.

The present case involves the '366 patent, assigned to Petitioner Pioneer. It is undisputed that each and every claim of the '366 patent requires a switching analog multiplier circuit. Pet. App. 13a. It is also undisputed that Micro Linear's accused product has no switching analog multiplier circuit. *Id.* at 14a; Opp. App. 28a. Therefore, the non-switching multiplier in Micro Linear's product could not literally infringe the '366 patent, and the parties so stipulated. Pet. App. 15a ("Plaintiff shall not have the right to appeal the unopposed determination that the accused products do not literally infringe the 'switching analog multiplier circuit' element."). Only the doctrine of equivalents remained.

The District Court issued a 29-page opinion construing the claims of the '366 patent, including the "switching analog multiplier circuit" language.[1] Opp. App. 1a-26a. Based on the court's interpretation of that phrase, Pioneer stipulated to summary judgment of noninfringement. Pet. App. 13a-17a. The issue on appeal to the Federal Circuit was whether prosecution history estoppel precluded Pioneer's assertion that the non-switching multiplier of

---

[1] Pioneer elected not to reproduce this November 12, 1998 claim construction order. It is reproduced herein as an appendix. Instead, Pioneer reproduced a July 19, 1999 claim construction order that interpreted claim language not at issue in the Petition. Pet. App. 20a-38a.

Micro Linear's product could be equivalent to the "switching analog multiplier circuit" called for by the '366 patent. After a careful review of the patent, specification, and public prosecution history record, the Federal Circuit concluded that prosecution history estoppel was properly applied. Pet. App. 9a.

An exchange during oral argument before the Federal Circuit, between the Court and counsel for Pioneer, succinctly summarizes the facts of this case:

> JUDGE: But you ended up with a claim 1 which recites a switching multiplier circuit, right?
>
> MR. BROWN: Absolutely.
>
> JUDGE: And what you're trying to do is squirm away from the word "switching" because the accused device is non-switching, is that right?
>
> MR. BROWN: That's correct.
>
> JUDGE: How can you avoid – even if that word switching had been there originally, you'd probably be out of court. But you put it in. You put it in, and there was prior art. Carpenter, right?
>
> MR. BROWN: There was what?
>
> JUDGE: Prior art. Carpenter. Isn't that the prior art?
>
> MR. BROWN: Carpenter.
>
> JUDGE: Carpenter, yes, sorry. I left Boston only 45 years ago. And that was a non-switching amplifier [*sic*, multiplier], right?
>
> MR. BROWN: You're saying – oh, yes.

JUDGE: Yes. And so the word "switching" distinguishes over Carpenter?

MR. BROWN: Yes.

Opp. App. 28a. These facts do not raise any unique or controverted legal issues. On the contrary, "it is perfectly well settled in this court by frequent decisions that where an inventor, seeking a broad claim which is rejected, in which rejection he acquiesces, substitutes therefor a narrower claim, he cannot be heard to insist that the construction of the claim allowed shall cover that which has been previously rejected." *Computing Scale Co. of Am. v. Automatic Scale Co.*, 204 U.S. 609, 617 (1907); *see also Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co.*, 152 U.S. 425, 429 (1894). Thus, the Federal Circuit properly applied prosecution history estoppel because Pioneer's "amendment was made for a reason related to patentability, to avoid prior art." Pet. App. 11a.

I. The Prosecution History of the '366 Patent

On May 12, 1986, Pioneer filed its application for a patent, which included nine claims. Pet. App. 2a. Claim 1 was the only independent claim. *Id.* at 2a-3a. All nine claims of the application were rejected by the examiner on September 24, 1986. Pet. App. 45a. The patent examiner concluded that claim 1 was "clearly anticipated by Carpenter." *Id.*

In response to the examiner's rejection, Pioneer amended claim 1, stating to the PTO that: "It is believed clear that there is no showing in the cited Carpenter Patent 4,437,146 of the *specific combination* set forth in amended claim 1." Pet. App. 49a-50a (emphasis added).

This representation to the Patent Office was equally applied to claims 7-9: "Amended claims 7 and claims 8 and 9 are all dependent on amended claim 1, and are likewise believed to be allowable." *Id.* at 50a. Claims 2-6 were canceled. *Id.* at 48a.

The "specific combination" overcoming Carpenter was the incorporation of the "switching" limitation and the additional limitations of the original application claims 2-6. Therefore, the addition of this limitation was squarely in response to the pending anticipation rejection under Carpenter. Carpenter teaches the use of a multiplier in a power supply, but lacks a *switching* analog multiplier. Pet. App. 9a; A1746 ¶ 27(a); A1753 ¶ 50(h); Opp. App. 28a.

After Pioneer submitted these amendments to the Patent Office, the examiner allowed application claims 1 and 7-9 without any further substantive actions. The '366 patent issued on June 30, 1987.

II. The Background of the Litigation

Despite the finding by the Federal Circuit that Pioneer's addition of the "switching" limitation was in response to a prior art rejection, and therefore results in classic prosecution history estoppel, Pioneer persists in arguing that its amendment was "inadvertent."

Over a decade passed since the '366 patent issued, and Pioneer did nothing about the allegedly "inadvertent" error by its patent attorney. Pioneer did not seek to

have the patent reissued without the "switching" limitation during the statutory two-year window following issuance, as it was entitled to do under 35 U.S.C. § 251.

Despite its inaction, Pioneer was fully aware of the presence of the "switching" limitation in its patent. In late 1991, Pioneer's then-exclusive licensee, Unitrode, accused Micro Linear of infringing the '366 patent. A1515. Pioneer encouraged Unitrode's patent enforcement strategy and secretly conferred with Unitrode about these allegations of patent infringement. A818. Six years before Pioneer concluded that the "switching" limitation was supposedly "inadvertent," Micro Linear explained to Pioneer's exclusive licensee as follows: "To elaborate, claim 1 of the '366, at column 6 line 25, specifically calls for 'a *switching* analog multiplier' (emphasis added). However, the multiplier in our ML4821 device is not a switching-type multiplier." A1516. In response, on December 18, 1992, Unitrode informed Micro Linear that it did not intend to further pursue the issue of patent infringement.[2] A1523. On December 14, 1995, several years after Unitrode dropped its charge of patent infringement against Micro Linear, Pioneer brought this suit. A143.

---

[2] An independent opinion rendered by Unitrode's own attorneys also concluded that products that used a non-switching multiplier, such as Unitrode's, could not infringe the claims of the '366 patent. A480-91. In 1994, Pioneer was informed of this opinion, specifically, that a product using "a nonswitching analog multiplier" would fall "outside the scope of the claims of the '366 patent." A1461 ¶ 9.

It was not until claim construction proceedings in the District Court that Pioneer revealed its litigation-induced interpretation of "switching analog multiplier circuit": that the word "switching" should "not be given limiting effect in this claim." A1048. In support of this position, Pioneer procured a declaration (in 1998) from the attorney who prosecuted the patent, professing to have added (in 1986) the word "switching" inadvertently. A1077.

In the District Court's decision construing the "switching analog multiplier circuit" element, Judge Lourdes Baird stated that she could not "take the drastic measure of ignoring the clear, plain language of Claim One, and thereby corrupt '366's public record." Opp. App. 15a. She determined that prosecution history estoppel was applicable to the patent claims, due to the applicant's amendment to avoid the pending prior art rejection. *Id.* at 18a.

The Federal Circuit conducted a *de novo* review of the record and affirmed the District Court's determination that the amendment was made to overcome a prior art rejection.

> We therefore conclude that Pioneer has failed to meet its burden of establishing a reason unrelated to patentability for its amendment. Our own examination of the prosecution history convinces us that the amendment was made to avoid prior art, the classic basis for the application of prosecution history estoppel.

Pet. App. 9a; *see also id.* at 10a ("the addition of this limitation was made to avoid prior art") & 11a ("the addition of the 'switching' limitation is responsive to the examiner's anticipation rejection and assisted Pioneer in

distinguishing its invention over prior art"). Micro Linear incorporates by reference the statement of facts in the opinion below. *See id.* at 2a-5a.

In its Questions Presented, Pioneer does not challenge the Federal Circuit's determination that the amendment "was made for a reason related to patentability, to avoid prior art." *Id.* at 11a. Rather, Pioneer ignores this inconvenient fact and instead boldly presumes that the amendment was made "without any nexus to a statutory requirement for patentability." Pet. at ii. Only as a result of this studied ignorance of the facts below does Pioneer proceed to debate the extraneous question of whether or not an allegedly inadvertent amendment may give rise to prosecution history estoppel.

THE WRIT SHOULD BE DENIED

I. The Federal Circuit Correctly Applied Classic Prosecution History Estoppel Under Well-Established Principles

Prosecution history estoppel was applied in the case because the patentee had amended its claims in response to a prior art rejection by the examiner under 35 U.S.C. § 102(b). Pet. App. 9a. That doctrine has been recognized by this Court for over a century, *Morgan Envelope*, 152 U.S. at 429, and has been applied on a regular basis by the Federal Circuit within its area of special expertise. Accordingly, this case does not present an important federal question, much less one that is unsettled or in conflict with relevant decisions of this Court. Sup. Ct. R. 10(c). To the contrary, an analysis of the prosecution

history of the '366 patent shows that the instant case involves the correct application of a properly stated rule of law.

A. The Federal Circuit Properly Applied this Court's Precedents Holding that Amendments to Overcome the Prior Art Result in Prosecution History Estoppel

Prosecution history estoppel is properly applied in this case because Pioneer added the "switching" limitation in response to a prior art rejection by the patent examiner. Pet. App. 9a; *Computing Scale*, 204 U.S. at 617. But if that were not enough, an analysis of the prosecution history of the '366 patent further demonstrates that prosecution history estoppel was applied consistent with the precedents of this Court.

First, statements made by Pioneer in the public prosecution history record plainly demonstrate that Pioneer's amendment was to overcome prior art. As explained by the Federal Circuit, "the prosecution history shows that Pioneer recognized that the combination of elements was important to the allowance of the claims." Pet. App. 10a. In response to the patent examiner's prior art rejection, Pioneer represented to the PTO that the amended claim recited the invention "in precise details,"[3] *id.* at 49a, and that the "specific combination" overcame the rejection in view of Carpenter. *Id.* at 49a-50a. Pioneer's reliance on its

---

[3] In the Petition, Pioneer substitutes an ellipsis for this portion of the prosecution history, upon which the Federal Circuit relied. *Compare* Pet. at 4 *with* Pet. App. 10a-11a & 49a.

"specific combination" to overcome the prior art served as a disclaimer of power supplies with non-switching multiplier circuits. *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136 (1942) ("By the amendment he recognized and emphasized the difference between the two phrases and proclaimed his abandonment of all that is embraced in that difference.").

Second, the amendment made by Pioneer to insert the "switching" limitation did, in fact, allow Pioneer to overcome the Carpenter prior art. This was clear from the record, A1746 ¶ 27(a); A1753 ¶ 50(h), and was admitted by Pioneer in open court before the Federal Circuit. Opp. App. 28a. Accordingly, Pioneer is bound by its amendment. *Hubbell v. United States*, 179 U.S. 77, 83 (1900) ("If an applicant, in order to get his patent, accepts one with a narrower claim than that contained in his original application, he is bound by it."). Limitations added during prosecution are strictly construed against the patentee. *Exhibit Supply*, 315 U.S. at 137.

Third, if Pioneer truly amended the claim for reasons other than the pending prior art rejection, it was required to ensure that the public prosecution history so indicated. Pioneer failed to do so. All that the public could discern from the public record was Pioneer's agreement to disclaim power supplies with non-switching multiplier circuits. Pioneer "cannot expect the courts to wade through the history of the art, and spell out what they might have claimed, but have not claimed." *Keystone Bridge Co. v Phoenix Iron Co.*, 95 U.S. 274, 277 (1877).

Fourth, even if there were any doubt that the amendment was made to overcome prior art, Pioneer failed to

overcome the presumptive application of prosecution history estoppel. Well before issues of claim construction arose in the present case, this Court held in *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.* that the burden is squarely with the patentee to establish the reason for an amendment during prosecution. 520 U.S. 17, 33 (1997). Thus, Pioneer was on notice that it was required to affirmatively demonstrate reasons unrelated to patentability for adding the "switching" limitation. As demonstrated herein, *see also infra* section I.B, and as the Federal Circuit concluded, Pet. App. 7a, Pioneer failed to adequately meet its burden.

Pioneer argues that amended claim 1 was similar to proposed claim 6, and that proposed claim 6 was rejected only for patentability reasons other than prior art. Pet. at 4. Pioneer should not be permitted to rely on speculative negative implication from the PTO's rejection of claim 6.[4] The District Court squarely considered the argument but dismissed it as a "display of acrobatic deductive reasoning." Opp. App. 14a. The Federal Circuit similarly concluded that the record did not support Pioneer's argument. Pet. App. 7a. Pioneer's petition to this Court is

---

[4] The examiner never indicated that claim 6 was allowable at all, as he would have been required to do if it were otherwise allowable but for its dependence on an independent claim. Manual Pat. Examining Proc. § 707.07(j). If anything, Pioneer forestalled any further prior art rejections by electing to cancel claim 6, Pet. App. at 48a, and instead using limitations borrowed from a number of claims (including claim 6) to overcome the prior art rejection of claim 1. *Id.* at 11a ("switching" limitation "assisted Pioneer in distinguishing its invention over prior art").

merely an invitation for this Court to re-examine the same record for a third time.[5]

The question of whether Pioneer's "claim 6 argument" is sufficient to overcome the *Warner-Jenkinson* presumption is the type of "case-by-case determination" that this Court has entrusted to the Federal Circuit's special expertise. *Warner-Jenkinson*, 520 U.S. at 40. Since *Warner-Jenkinson*, the Federal Circuit has repeatedly determined whether amendments were made for reasons related to patentability, and has ferreted out cases (such as the present one) where the patentee attempts to disguise a classic case of prosecution history estoppel as something else. *See, e.g., Loral Fairchild Corp. v. Sony Corp.*, 181 F.3d 1313, 1326-27 (Fed. Cir. 1999); *Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 829-30 (Fed. Cir. 1999); *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1432-33 (Fed. Cir. 1997). Certiorari is not warranted to micromanage this exercise. *Cf.* Sup. Ct. R. 10.

B. The Federal Circuit Did Not Reversibly Err in Determining that the Alleged Evidence of Inadvertence Did Not Prevent the Application of Prosecution History Estoppel

Against the weight of the public prosecution history record, Pioneer offers a cursory, one-sentence passage from a declaration by its patent attorney, Mr. Beecher, who (years after the '366 patent issued) claimed to have

---

[5] The reasons why the 35 U.S.C. § 112 rejection of claim 6 does not permit Pioneer to avoid prosecution history estoppel is sufficiently set forth in the record below. *See* Pet. App. 10a-11a; Opp. App. 14a-16a.

made a "mistake" in adding the word "switching." A1077. The Federal Circuit sagely discounted the weight of this newly-minted evidence. Use of Mr. Beecher's privately-held recollections would not "apprise the public of what is still open to them," as a patent is required to do. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996). While courts may be called upon to "evaluate the testimony [of experts] in relation to the overall structure of the patent," *id.* at 389, "judges are not, however, obliged to blindly follow such testimony," *id.* at 387 (quoting A. Walker, Patent Laws § 189, at 173 (3d ed. 1895)). This is particularly true where, as here, the testimony plainly is litigation-induced and not contemporaneous with the time of patenting. *See, e.g., Senmed, Inc. v. Richard-Allan Med. Indus., Inc.*, 888 F.2d 815, 819 n.8 (Fed. Cir. 1989).

It was not error for the Federal Circuit to reject Pioneer's self-serving claim of inadvertence. Twelve years had passed between the amendment of the claims in 1986 and Mr. Beecher's 1998 declaration. *See* Pet. App. 50a; A1077; A1079. Yet, Mr. Beecher offered no explanation for how he remembers having accidentally added the term "switching" over a decade ago, after having prosecuted hundreds of other patents. A178. The Federal Circuit was well-justified to discount the declaration. *Miller v. Brass Co.*, 104 U.S. 350, 352 (1881) ("The pretence in this case that there was an inadvertence and oversight which had escaped the notice of the patentee for fifteen years is too bald for human credence.").

There is simply no reason for this Court to repeat the exercise that the Federal Circuit and District Court have already completed and to delve into prosecution history

to determine whether or not Pioneer could rebut the *Warner-Jenkinson* presumption. There is no indication that the courts below reached an erroneous conclusion, nor is there any basis to suggest that the courts improperly applied the law.

II. This Court Should Not Review Obiter Dicta Statements of the Federal Circuit Concerning Inadvertent Amendments

Pioneer frames both of its Questions Presented around dicta in the Federal Circuit's opinion suggesting that alleged "inadvertence" does not by itself overcome the application of prosecution history estoppel. Because this dicta has no precedential effect, and because it did not depart from this Court's holdings on the subject, certiorari should not be granted.

A. Review is Not Warranted Because the Questions Presented are Directed to an Alternative Ruling Not Essential to Determination of the Case Below

The Federal Circuit affirmed the application of prosecution history estoppel because "the amendment was made to avoid prior art." Pet. App. 9a. Consequently, the Federal Circuit's discussion of the *effect of* inadvertent amendments was merely dicta, because no inadvertence was found.

In its Petition, Pioneer expressly calls out a portion of the Federal Circuit's decision that states: "*Even if we were*

to accept Pioneer's explanation for its amendment, inadvertence is not a sufficient reason to overcome the bar of prosecution history estoppel on the facts of this case." Pet. at 9 (quoting Pet. App. 8a) (emphasis added). Pioneer focuses on the Federal Circuit's discussion of the effect of "inadvertent" amendments, but that discussion was completely unnecessary to the outcome of the case below. The Federal Circuit explicitly held that the "switching" amendment was *not* inadvertent, but deliberate: it was made to avoid a prior art objection. Pioneer's two Questions Presented are framed around the unstated assumption that the Federal Circuit was wrong, and that the amendment was "inadvertent." Both Questions Presented, in other words, are not even reached unless this Court first reverses the Federal Circuit's *de novo* affirmation of the District Court's examination of the prosecution history.

As dicta, the Federal Circuit's comments about the effect of inadvertent amendment do not carry the force of precedent. *In re McGrew*, 120 F.3d 1236, 1238 (Fed. Cir. 1997) ("[D]ictum is not authoritative. It is the part of an opinion that a later court, even if it is an inferior court, is free to reject.") (quoting *United States v. Crawley*, 837 F.2d 291, 292 (7th Cir. 1988)). Consequently, even if the Federal Circuit's discussion of inadvertent amendments was wrong as a matter of law, there is no need to reverse the decision below. Certiorari is inappropriate because the obiter dicta statements of the Federal Circuit "present[ ] nothing reviewable by this Court."[6] *Stickel v. United*

---

[6] Even if this dicta were an actual holding, it would still have no precedential effect on cases that do not present the

States, 76 S. Ct. 1067, 1068 (1956) (Harlan, J.); *see also ETSI Pipeline Project v. Missouri*, 484 U.S. 495, 516 n.11 (1988); *Smith v. Butler*, 366 U.S. 161, 161 (1961) (writ dismissed where decisions below "did not turn on the issue on the basis of which certiorari was granted").

In contrast to Pioneer's strident critique of the Federal Circuit's dicta concerning inadvertence, Pioneer discusses the actual holding itself (that the amendment was to avoid prior art) only briefly in its Petition, and substantially misrepresents what occurred below. In footnote 1, Pioneer asserts that the Federal Circuit's holding that the amendment was made to avoid prior art was in error because "not even the trial court reached such a conclusion." Pet. at 5 n.1.

That statement is demonstrably false. In an opinion Pioneer failed to include in its appendix, the District Court expressly found that Pioneer was "estopped by the file wrapper doctrine" because "the Patent Office accepted the amendments of Original Claims One through Five as distinguished from prior art based on these substantive changes, which included the switching limitation." Opp. App. 18a; *see also id.* at 8a, 13a-14a & 17a. The Federal Circuit has already affirmed this conclusion of the District Court based on a *de novo* examination of the prosecution history. Pet. App. 5a. For this Court to even reach the dicta contested by Pioneer, it must conduct

---

unique facts of the instant case (*see supra* section I.B). The Federal Circuit stated only that "inadvertence is not a sufficient reason to overcome the bar of prosecution history estoppel *on the facts of this case*." Pet. App. 8a (emphasis added).

a second *de novo* review of the same evidence. Nothing suggests that such an effort is worthy of certiorari.

B. A Claim of Inadvertence Does Not Effect a Wholesale Exemption from the Doctrine of Prosecution History Estoppel

Even if properly presented as a question for this Court, the Federal Circuit's obiter dicta that "inadvertence is not a sufficient reason to overcome the bar of prosecution history estoppel on the facts of this case" is unworthy of review because it is consistent with this Court's precedents.

This Court has long recognized the fundamental importance of the public notice function of patents. "The public should not be deprived of rights supposed to belong to it, without being clearly told what it is that limits these rights." *Merrill v. Yeomans*, 94 U.S. 568, 573 (1876); *see also White v. Dunbar*, 119 U.S. 47, 52 (1886) ("The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."); *Markman*, 517 U.S. at 390. Because patentees have the ability to amend their claims during prosecution and appeal any adverse conclusions of the patent examiner, it falls upon the patentee to clearly claim the invention. *Hubbell*, 179 U.S. at 83-84.

If a mere allegation of inadvertence were sufficient to carve out an exception to the doctrine of prosecution history estoppel, the public notice function of patents

would be rendered a nullity. The Federal Circuit was justified in discounting the claim of inadvertence "on the facts of this case," Pet. App. 8a, because Mr. Beecher's personally-held recollections provided no notice to the public that Pioneer would seek to disclaim the "switching" limitation. Mistakes by patent attorneys are a matter between the attorney and client, and Pioneer should not be permitted to exploit the alleged error of its attorney to the prejudice of the public. *Cf. Link v. Wabash R.R. Co.*, 370 U.S. 626, 633-34 (1962) ("Petitioner voluntarily chose this attorney as his representative in the action, and he cannot now avoid the consequences of the acts or omissions of this freely selected agent."). Thus, the doctrine of equivalents should not be available to eliminate an allegedly inadvertent claim limitation from a patent, as this Court has recognized. *Warner-Jenkinson*, 520 U.S. at 29 ("It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.").

III. The Effect of "Inadvertent" Amendment of Patent Claims Lacks Sufficient Importance to Warrant Review

Pioneer's assertions that the Federal Circuit's opinion "will negatively impact the patent system" are without merit. Pet. at 13. The only effect (if any) of this case on patentees is to reiterate that patents should be prosecuted carefully.

A. "Inadvertent" Amendments That May Result in Prosecution History Estoppel are Infrequent and of Negligible Importance to the Patent System

Pioneer fails to demonstrate that alleged "inadvertence" by patent attorneys raises any type of important federal question. It is notable that in discussing how the decision below will supposedly "negatively impact the patent system," Pet. at 13-15, Pioneer not once indicates the frequency or impact of "inadvertent" claim amendments. This Court long ago recognized that inadvertent amendments are rare. *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 575 (1863) ("Since the date of [the Patent Act of 1836], not only the Patent Office but the bar can furnish gentlemen fully competent to the task of drawing up proper specifications, and but little liable to commit blunders from inadvertency. Specifications now seldom issue from the Patent Office to which such an imputation can be made."). Certiorari is not warranted to address sporadic issues of no general importance. *Rice v. Sioux City Memorial Park Cemetery*, 349 U.S. 70, 74 (1955).

Even if Pioneer were somehow able to establish that inadvertent claim amendments occurred with any frequency, the Federal Circuit's dicta statements could have no negative impact on the patent system. By definition, no applicant plans to make an "inadvertent" amendment, and consequently there can be no effect on the investment and inventive efforts that the patent system is designed to promote.

B. Reissue Proceedings Already Afford Adequate Remedy for "Inadvertent" Amendment by Patentees

Congress has created a statutory mechanism (the reissue application) to allow patentees to correct "inadvertent" errors. 35 U.S.C. § 251. Under predecessor provisions to that statute, this Court has held that "[i]f the patentees have not claimed the whole of their invention, and the omission has been the result of inadvertence, they should have sought to correct the error by a surrender of their patent and an application for a re-issue." *Keystone Bridge*, 95 U.S. at 278. This procedure provides adequate notice to the public and allows the PTO to offer its administrative expertise as to whether the changed claim is supported by the specification and is permissible over the prior art.

Given the availability of the reissue process, the Federal Circuit's treatment of inadvertent amendments does not pose an issue of public importance warranting this Court's intervention. The dicta below only affects careless patentees who fail to take advantage of the reissue process. Pioneer's desire for an exemption from the reissue provisions ignores the remedy already afforded by Congress and undermines the statutory protections (*i.e.*, intervening rights) that the reissue statute affords to the public.

IV. This Court's Recent Grant of Certiorari in *Festo* is Immaterial to Pioneer's Petition

In an effort to recast its claims as worthy of consideration, Pioneer strains to tie its fortunes to the petition for

certiorari in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, Docket No. 00-1543, *cert. granted*, 533 U.S. ___, 69 U.S.L.W. 3673 (June 18, 2001). *See, e.g.*, Pet. at 9, 13 & 15 ("[f]ollowing the footsteps of *Festo*"; "its desire to expand *Festo*"; "the unfortunate legacy of *Festo*"). This effort is entirely misplaced. There was no dispute in *Festo* as to whether prosecution history estoppel applied to amendments made in response to prior art rejections, because according to petitioner in that case, "[t]he claims were never rejected in view of prior art." *See* Pet. for Writ of Cert., No. 00-1543, at 3. However, here Pioneer's patent *was* amended in response to a prior art rejection, in that the relevant claims were found fully anticipated by Carpenter.

An examination of issues in *Festo* demonstrates that the questions presented by Pioneer have nothing to do with those presented in *Festo*. The first question in *Festo* is whether claim-narrowing amendments including those "*not* related to prior art" create prosecution history estoppel. *Id.* at i (emphasis added). Here, by contrast, the Federal Circuit found that Pioneer's amendment "*was* made to avoid prior art." Pet. App. 9a (emphasis added).

The second question in *Festo* is "[w]hether the finding of prosecution history estoppel completely bars the application of the doctrine of equivalents" for the claim element. *See* Pet. for Writ of Cert., No. 00-1543, at i. This issue is nowhere mentioned in Pioneer's Petition, and therefore, the second question of *Festo* is not properly raised in this case. *See* Sup. Ct. R. 14.1(a). This is not surprising. A patent element directed to a "switching" analog multiplier circuit cannot possibly encompass by

equivalents the "precise converse," namely, Micro Linear's non-switching multiplier circuit, as the District Court noted. Opp. App. 18a.

In *Festo*, the most vociferous dissenter was Judge Pauline Newman. In briefing the petition for certiorari, petitioner and numerous amicus curiae in *Festo* extensively relied upon Judge Newman's lengthy dissent. However, the disputed issues in *Festo* are entirely unrelated to the application of prosecution history estoppel to Pioneer's amendment over the prior art. Thus, Judge Newman joined the unanimous opinion in *this* case, concluding that the instant case presents a "classic" case of prosecution history estoppel. The application of prosecution history estoppel in patent cases such as this one is well-established and, therefore, unworthy of certiorari. *See Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 221 (1940) ("The patentee may not, by resort to the doctrine of equivalents, give to an allowed claim a scope which it might have had without the amendments, the cancellation of which amounts to a disclaimer."). Thus, even if this Court were ultimately to reverse *Festo*, it would not affect this case. Any reversal of *Festo* would not affect the basic conclusion of the Federal Circuit that this case presents a classic instance of estoppel based on prior art. Vacating this case for reconsideration after any possible reversal of *Festo*, as Pioneer seems to suggest, would not change its outcome.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be denied.

Respectfully submitted,

VERA M. ELSON
(Counsel of Record)
MICHAEL BARCLAY
ROGER J. CHIN
JOSH A. GOLDFOOT
WILSON SONSINI GOODRICH & ROSATI
650 Page Mill Road
Palo Alto, California 94304
Telephone: (650) 493-9300

Counsel for Respondent
Micro Linear Corporation

June 25, 2001

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

PIONEER MAGNETICS, INC., a California corporation, Plaintiff, v. MICRO LINEAR CORPORATION, a Delware corporation, Defendant. AND RELATED COUNTERCLAIMS.	Case No. CV 95-8307 LGB (Ex) INTERPRETATION OF U.S. PATENT 4,677,366 (FILED NOV 12 1998)

I. INTRODUCTION.

This litigation arises out of the alleged infringement of a power supply circuitry patent, identified as United States Patent 4,677,366 (" '366"). Currently before the court is plaintiff's *Markman* motion requesting interpretation of the patent. The Court INTERPRETS Claim One's "switching analog multiplier circuit" as follows: (1) the plain language of the patent and its prosecution history require that Claim One contain the limiting effect of the modifier "switching;" (2) therefore, the doctrine of file wrapper estoppel precludes the finding that a "non-switching multiplier" is equivalent to a "switching multiplier"; and (3) the phrase does not constitute means-plus function language. The Court also INTERPRETS Claim One's "circuit means" to constitute means-plus-function language. Finally, the Court ORDERS the parties to file

additional briefing on the interpretation of all other terms in dispute, if any, in compliance with the procedures detailed below.

II. FACTUAL AND PROCEDURAL BACKGROUND.

A. Description of the Patented Invention.

The patent in question describes a power supply circuitry designed to supply a steady electrical current source to another circuit. (Blauschild Decl., 3:19-20). Specifically, the power supply receives variant and inconsistent levels of input voltage and then emits a constant output voltage. (Wilkinson Decl., 27:25-28:2). This steadying output is described as the "unity power factor." (Blauschild, 3:22-26; Wilkinson, 34:12-15).

B. Procedural History.

On December 14, 1995, plaintiff Pioneer Magnetics filed a complaint against Micro Linear for patent infringement. The complaint asks for relief from the alleged infringement of United States Patent '366 by defendant's use, sale, and manufacture of "unity power factor" power supplies. This Court exercised subject matter jurisdiction pursuant to 28 U.S.C. § 1338.

On February 14, 1996, defendant answered the complaint, asserting several affirmative defenses, and counterclaimed for declaratory relief. Plaintiff answered the counterclaim with several affirmative defenses on March 7, 1996.

On October 30, 1996, defendant amended its answer to the plaintiff's complaint.

Between October 1996 and May 1998, the parties filed several motions for summary judgment involving the asserted affirmative defenses. Denying all motions but one, the Court granted defendant's motion for summary adjudication as to all claims by plaintiff based on infringing activities that occurred before December 14, 1989.

On January 12, 1998, defendant filed a motion for leave to amend its answer and for an award of fees and costs. On February 23, 1998, the Court granted leave but not the award. The amended answer, deemed filed on February 23, 1998, asserted additional affirmative defenses.

Significant to the parties' current disagreement over which terms are in dispute, on January 29, 1998, by telephone conference, the Court set procedures for the *Markman* hearing, laying out the following:

1) On or before February 16, 1998, each side was to file and serve an identification of each patent claim phrase on which that side sought Court interpretation, together with the exact interpretation that that side contended was correct.

2) On or before March 2, 1998, each side was to file and serve a statement agreeing to or disputing each interpretation urged by the opposing side while reciting the exact interpretation of each disputed term that it contended was correct.

3) On or before March 23, 1998, plaintiff was to file and serve its memorandum of points and authorities and evidence in support of its interpretations of the disputed claim phrases.

4) On or before April 13, 1998, defendant was to file and serve its memorandum of points and authorities and evidence in support of its interpretation of the disputed claim phrases.

5) On or before May 4, 1998, plaintiff was to file and serve its memorandum of points and authorities and evidence in reply. An April 14, 1998 stipulation altered these dates.

On February 17, 1998, the parties filed a list of claims in dispute. Plaintiff requested the interpretation of two phrases, and defendant requested the interpretation of twenty-three phrases. On February 18, 1998, plaintiff filed an *ex parte* application to strike defendant's requests for claim construction determinations, asserting that the majority of defendant's terms did not constitute either a "case or controversy" for this Court to adjudicate under Article III, Section II of the United States Constitution. In support of this argument, plaintiff pointed to defendant's responses to interrogatories that explained the basis for defendant's claim of non-infringement. Plaintiff argued that because defendant identified only two claim terms at issue in the responses, only two terms were open to interpretation. Defendant opposed the application on February 20, 1998, arguing that it was not under any obligation to supplement these responses given the Court's stay on discovery. Plaintiff filed a reply on February 23, 1998. On February 25, 1998, the Court denied plaintiff's *ex parte* application. The parties filed statements reciting the interpretation of each disputed term that it contended was correct.

Also pertinent to the parties' disagreement over which terms are in dispute, after granting plaintiff a page extension on its *Markman* motion, on May 4, 1998, defendant filed an application to extend the page limit on its opposition by ten pages; plaintiff opposed this application, arguing that defendant would use the space to brief claims not in controversy. On May 7, 1998, the Court granted the defendant's application.

On April 6, 1998, plaintiff filed its motion for interpretation of patent claim '366. After advocating that the Court should only interpret two claims on three different occasions – once during the January 29, 1998 telephone conference, once in its *ex parte* application to strike defendant's request to interpret claims, and once in its *ex parte* application to limit the pages of defendant's opposition – plaintiff argues for a fourth time in the body of the *Markman* motion that the claims presented by defendant, other than those two also presented by plaintiff, should not be interpreted. (Motion, 19:11-20:2). Instead of presenting its interpretation of these claims in the body of the motion, plaintiff asks the Court to consider the arguments of declarant Bruce L. Wilkinson, pages forty through forty five, effectively increasing the length of its motion by six pages.

On April 3, 1998 the parties filed an amended submission of claims in dispute, shortening the list of terms in contention to thirteen.

On May 4, 1998, defendant filed its opposition to plaintiff's interpretation, and on May 26, 1998 plaintiff filed its reply.

On September 15, 1998 defendant filed an *ex parte* application for the setting of a telephone conference. In plaintiff's September 16, 1998 opposition, it noted that the parties were "willing to agree on more of the patent claim definitions proposed by plaintiff." (September 16, 1998 *Ex Parte Opposition*, 2:n.1). However, the parties never updated the Court on whether they had agreed on more terms.

C. Language of the Patent.

United States Patent '366 describes four claims, one of which is independent and three of which are dependent. The terms that are interpreted in this order are underlined.

1. In a switch power supply: a rectifier adapted to be connected to the alternating current line; a boost converter connected to the output of said rectifier, said converter including an input circuit having a series-connected inductance coil and an output circuit having a shunt-connected storage capacitor, and further including a power switch connected between the inductance coil and the storage capacitor; and a control circuit connected to said power switch for providing a switching control signal for said converter having a current reference which tracks the waveform of the alternating current line voltage to cause the power supply to exhibit unity power factor to the alternating current line, said control circuit including a voltage error amplifier connected to the output of said converter and to a source of reference voltage for producing an output which is a function of the difference between the output voltage of the converter and the reference voltage from the source, a *switching analog multiplier circuit* connected to the output of said voltage

error amplifier and to the output of said rectifier to produce an output which is proportional to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared, a current regulator amplifier connected to the converter and to the multiplier and responsive to a voltage representing the current flow in the converter and to the output of the multiplier for producing a current error signal, and *circuit means* including a pulse-width modulator connected to said current regulator amplifier and responsive to said current error signal therefrom for introducing said switching control signal to said power switch.

2. The combination defined in claim 1, in which said multiplier is a switching type, and in which said control circuit includes a timer and ramp signal generator for supplying clock signals to said switching multiplier and ramp signals to said pulse width modulator.

3. The combination defined in claim 1, in which said power switch comprises a field effect transistor.

4. The combination defined in claim 1, in which said rectifier comprises a full-wave diode rectifier.

'366 Patent, column 6, lns. 7-47 (emphasis added).

D. Prosecution History of Patent '366.

The parties do not dispute the following facts concerning the prosecution history of patent '366.

On May 12, 1986, Keith Beecher ("Beecher"), Pioneer's patent attorney, filed the original patent application that the Patent and Trademark Office eventually issued as the '366 Patent. (Elson Decl., Exh. 1, 3:22; Elson Decl., Exh. 2, 11). As part of the application, Beecher

submitted nine patent claims for examination ("Original Claims"). (Beecher Decl., 21:8-9; Elson Decl., Exh. 2). Original Claim One was the sole independent claim, with the other eight claims directly or indirectly dependant on Original Claim One. (Beecher Decl. 21: 10-13; Elson Decl., Exh. 2). Three of these Original Claims affect the construction of '366. First, Original Claim Four states,

> The combination defined in claim 3, in which said control circuit *includes a multiplier* connected to the output of said voltage error amplifier and to the output of said rectifier to produce an output which is proportional to the output of said voltage error amplifier multiplied by the instantaneous line voltage and divided by the RMS line voltage squared.

(Elson Decl., Exh. 2, 12 (emphasis added)). Second, Original Claim Six states, "[t]he combination defined in claim 5, in which said last-named circuit means includes a pulse width modulator." (Elson Decl., Exh. 2, 12). Third, Original Claim Seven states,

> The combination defined in claim 6, in which said *multiplier is a switching type*, and in which said control circuit includes a timer and ramp signal generator for supplying clock signals to said switching multiplier and ramp signals to said pulse width modulator.

(Elson Decl., Exh. 2, 12 (emphasis added)).

On September 24, 1986, the Patent and Trademark Office rejected all nine claims. (Elson Decl., Exh. 5, 16). The office rejected Original Claims One through Five and Eight and Nine as anticipated by prior art. (Elson Decl., Exh. 5, 18). It also rejected Original Claims Six and Seven "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The phrase 'said last-named circuit means' lacks proper antecedent basis in the claims." (Beecher Decl., 21:23-25; Elson Decl., Exh. 5, 17). Beecher did not dispute with the patent examiner the rejection of the claims. (Beecher Decl., 22:8-9).

On November 3, 1986, the applicants filed an Amendment with the Patent and Trademark office. (Elson Decl., Exh. 7). The Amendment made the following changes to the claims in controversy:

- The term "converter" in Original Claim One was amended to be specified as a "boost converter" in Claim One. Original Claim Two, which specified "said converter" as a "boost converter," was eliminated. (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 11).

- The tense of "tracking" in Original Claim One was changed to "which tracks" in Claim One. (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 11).

- The language in Original Claim Three was added to Claim One, with the elimination of the introductory phrase "[t]he combination defined in claim 1" and a change of tense of "includes" to "including." (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 11).

- The language of Original Claim Four was added to Claim One, with the elimination of the introductory language "[t]he combination defined in claim 3, in which said control circuit includes." In addition, the term "multiplier" in Original Claim Four was designated a "switching analog multiplier circuit" in Claim One. (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 12).

- The language of Original Claim Five was added to Claim One, with the elimination of the introductory

language "[t]he combination defined in claim 4, and which includes." In addition, the comma after "current error signal" was changed to a semi-colon. Also, "circuit means connected" in Original Claim Five was changed in Claim One to "circuit means including a pulse-width modulator connected." Original Claim Six, which designated the "last-named circuit" to include a "pulse width modulator," was eliminated. (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 12).

- Original Claim Seven was renumbered Claim Two. In addition, "[t]he combination defined in claim 6" was changed to "[t]he combination defined in claim 1." (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 12).

Beecher made the following relevant comments in the Remarks section of the patent amendment. "Claims 2-6 have been cancelled [sic], and the subject matter of those claims has been incorporated into amended claim 1." (Motion, Exh. 4, 85). He further remarked, "[c]laim 7 has been amended so that it may depend on amended claim 1, and also in order that the multiplier recited in claim 7 may be specified as a 'pulse-width' type." (Motion, Exh. 4, 85).

Beecher declares that he had no intention of adding the word "switching" to Claim One. (Beecher Decl. 23:12-13).

On February 2, 1987, the patent examiner issued a notice of allowability for the amendment. (Elson Decl., Exh. 9). On June 30, 1987, '366 issued to applicants. (Elson Decl., Exh. 1, 3:75).

III. INTERPRETATION OF PATENT '366.

A. Legal Standard for Patent Interpretation.

In *Markman v. Westview Instruments, Inc.*, the Supreme Court held that the interpretation of a patent claim – the portion of the patent document that defines the scope of the patentee's rights – is a matter of law exclusively within the province of the court and is not a factual question for the jury. 517 U.S. 370, 372 (1996). The *Markman* decision suggested that a trial court could consider various types of evidence when interpreting a patent, including expert testimony. *See* 517 U.S. at 388-90. Shortly after the Supreme Court handed down *Markman*, the Federal Circuit, in *Vitronics Corp. v. Conceptronic, Inc.*, expanded on the Court's dicta concerning evidence available to a trial court in interpreting patent claims. 90 F.3d 1576, 1581-83 (Fed. Cir. 1996). The Federal Circuit held that if intrinsic evidence can, by itself, resolve ambiguity in a patent term, then a court may not rely on extrinsic evidence, such as expert testimony, to construe the term. *See id.* at 1583. A trial court may only use extrinsic evidence when intrinsic evidence fails to illuminate the meaning of the disputed claim. *See id.* Moreover, extrinsic evidence cannot broaden the reach of a claim or contradict explicit language. *See id.*

The Federal Circuit detailed a hierarchy of specific types evidence that a court may consider. When interpreting a patent, a trial court must first look at the language of the claim itself. *See id.* at 1582. Courts should typically construe terms by their common, customary meaning, but a patentee is allowed to define her own terms in the specification section of the patent. *See id.* Therefore,

courts must always review the specification, which frequently acts as an explicit or at least implicit "dictionary" for claim terms. *See id.* The language in the specification is dispositive, and "it is the single best guide to the meaning of a disputed term." *Id.* In addition, a court may consider the prosecution history of the patent as evidence of term meaning. *See id.* This history contains the complete record of all the filings and examinations before the Patent and Trademark Office, including representations made by the applicant regarding the significance of claims. *See id.* The history also limits the interpretation of terms by recording the exclusion of any term definition disclaimed during the prosecution. *See id.*

Only when intrinsic evidence fails to resolve ambiguity in a disputed claim term may a court rely on extrinsic evidence. *See id.* at 1583. The policy rationale supporting this evidentiary limitation is that prospective patentees must have access to public records concerning the patent to "design around" a prior art. *Id.* If expert testimony or other extrinsic evidence were permitted to alter the record, then this public benefit would be frustrated. *See id.* Accordingly, a court can only examine extrinsic evidence if the evidence does not contradict the claim language, the specification, or the prosecution history but instead supplements it. *See id.* at 1584-85.

B. Disputed Terms.

1. "Switching Analog Multiplier Circuit."

a. As a Threshold Issue, the Plain Language of Claim One and Its Prosecution History Require that "Switching" Modify the Word "Multiplier."

The parties' *Markman* papers focus primarily on the disputed term "switching analog multiplier circuit" in Claim One. Plaintiff argues that the claim mistakenly contains the word "switching," and therefore, it should not be given limiting effect in this claim. (Plaintiff's Second Amended Statement of Patent Claim Interpretations ("Plaintiff's Interpretations"), Exh. B, 6). Meanwhile, defendant argues that the claim cannot be interpreted to include a non-switching analog multiplier because the claim is explicitly limited by the word "switching." (Defendant's Identification of Patent Claim Terms ("Defendant's Interpretations"), Exh. A, 6).

Specifically, plaintiff argues that the Court should effectively ignore the "switching" modification in Claim One based on three rationales: (1) inclusion of the term is logically inconsistent with the prosecution history; (2) Beecher declares that he erroneously inserted the "switching" term into Claim One; and (3) case law does not permit a redundant "switching" limitation in Claim One and its dependant Claim Two.

First, plaintiff argues that inclusion of the word "switching" was "obvious error," and therefore, it should not limit Claim One. (Motion, 9:15-22). Plaintiff argues that because the Patent and Trademark Office rejected Original Claims Six and Seven on the basis of improper form, rather than invalidation by prior art, Original

Claims Six and Seven impliedly contained subject matter acceptable to the Patent Office. (Motion, 9:15-22; Beecher Decl., 21:17-25). Therefore, according to plaintiff's argument, Original Claim Six, which does not reference a switching analog multiplier circuit in the body of the claim, would have been acceptable to the Patent Office but for its procedural deficiency. (Beecher Decl., 22:1-5). This, in turn, allegedly signifies that any claim would have been acceptable to the patent office without a switching limitation, thereby implying that the switching limitation in Original Claims One through Six was not critical to distinguishment from prior art. (Beecher Decl., 22:1-5, 22:14-17).

In an attempt to buttress this display of acrobatic deductive reasoning, plaintiff cites to the Remarks section of the amended application. In that section, Beecher remarked that the subject matter of Original Claims One through Six was incorporated into Claim One. (Motion, Exh. 4, 85). In addition, he noted that "amended claim 1 represents original claim 6 in independent form, and that claim 6 has been amended to overcome the objection. . . . " (Motion, Exh. 4, 85). Furthermore, while the Remarks section recognizes various changes in the amendment, it fails to recognize the modification of "multiplier" to "switching analog multiplier" in Claim One. (Motion, Exh. 4, 85-86).

While plaintiff provides a possible explanation for inconsistencies between the original and amended applications, it by no means dispels all questions concerning the prosecution history. For example, plaintiff argues that the inclusion of "switching" in Claim One is "obvious error" because the word "switching" is also present in

Claim Two; however, plaintiff fails to explain why the inclusion of "switching" in Claim Two is not the error, with Claim One containing the proper limitation. Moreover, while Original Claims Six and Seven contained technical deficiencies, the record fails to indicate definitively that Original Claim Six would have been acceptable solely upon correction of the noted deficiencies. Alternatively, plaintiff could have added language to the Original Claims regardless of the office's technical deficiency finding. Finally, plaintiff makes no attempt to explain why it never attempted to correct the "obvious error" in the 1987 patent before this instant suit.

The Court cannot take the drastic measure of ignoring the clear, plain language of Claim One, and thereby corrupt '366's public record. As articulated by the Federal Circuit in *Vitronics Corp. v. Conceptronics, Inc.*, a patent's public record serves a "notice function" to the world concerning the proprietary nature of the patented invention; the public can review and rely on the record, apply established rules of claim construction, ascertain the scope of the patentee's invention, and "design around" the claimed invention. 90 F.3d 1576, 1583 (Fed. Cir. 1996) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 978-79 (Fed. Cir. 1995)). To take an about face and ignore the explicit "switching" limitation would radically alter '366's public record, thereby preventing prospective patentees from differentiating their inventions from '366. *See* 90 F.3d at 1583.

Second, courts interpreting patent claims cannot contradict claim language with extrinsic evidence. *See Vitronics Corp.*, 90 F.3d at 1581-83. When the language of the patent plainly defines the scope of the patent, as in this

case, a court cannot examine expert testimony. *See id.* Interpreting "switching" multipliers to include "non-switching" multipliers based on Beecher's declaration would run afoul of this mandate. *See id.* Accordingly, this Court cannot afford any weight to Bleecher's declaration that he made an error in including the word "switching."

Finally, plaintiff argues that "an independent claim should not be interpreted in a manner which causes a claim dependent upon it not to be differentiated." (Reply, 14:3-15:2). Therefore, plaintiff argues, if the "switching analog multiplier circuit" limits Claim One, it would not be differentiated from Claim Two which also includes a "switching" limitation. (Reply, 14:3-15:2). However, claim differentiation only requires the incorporation of some additional limitation not present in an independent claim. *See* 37 C.F.R. § 1.75(c) (1997) ("One or more claims may be presented in dependent form, referring back to *and further limiting* another claim or claims in the same application.") (emphasis added). Although Claim Two reiterates Claim One's "switching" limitation, it nonetheless is differentiated from Claim One with the inclusion of a "timer and ramp signal generator." Therefore, plaintiff's argument that Claims One and Two are redundant lacks merit based on a plain reading of the two claims.

b. The Doctrine of File Wrapper Estoppel Prevents a Finding that a "Non-switching Multiplier" Is Equivalent to a Switching Multiplier."

Under the doctrine of equivalents, a patent owner may hold as an infringement a product or process that does not correspond to the literal terms of the patent

claims but performs substantially the same function in substantially the same way to obtain the same result. *See Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 117 S.Ct. 1040, 1045 (1997). However, the doctrine of file wrapper estoppel maintains that if the patent applicant narrowed her claims by amendment or cancellation to meet the objections of the Patent and Trademark Office examiner as to the patentability of the original claims in light of the prior art, she and her assigns cannot later "recapture" by construction the full scope of the claims that she previously surrendered. *See id.* at 1049-50.

In the instant interpretation, the parties request that the Court identify what equivalents of "switching multiplier," if any, are barred by the doctrine of file wrapper estoppel. (Motion, 10:1-12:5; Opposition, 10:17-12:4). Plaintiff argues that because inclusion of the word "switching" was in error and not required of Claim One, the doctrine of file wrapper estoppel does not bar interpreting a "non-switching" multiplier as equivalent to the multiplier in Claim One. (Motion, 10:19-26). Meanwhile, defendant argues that the prosecution history prevents the finding that a non-switching multiplier is equivalent to a switching multiplier. (Opposition, 11:22-12:4).

The prosecution history clearly sets forth what claims plaintiff surrendered in its Amendment of '366. The Patent Office rejected Original Claims One through Five as anticipated by prior art. (Elson Decl., Exh. 5, 16). Beecher did not dispute the rejections of these claims on this ground. (Beecher Decl., 22:8-9). Nor is there a record of appeal of the rejection. *See I.T.S. Rubber Co. v. Essex Rubber Co.*, 272 U.S. 429 (1926) ("If dissatisfied with the rejection

he should pursue his remedy by appeal. . . . Whether the examiner was right or wrong in rejecting the original claim, the court is not to inquire.").

Aside from changes in syntax, verb tense, and style, the amended patent application contained three substantive changes over Original Claims One through Five. First, the term "converter" in Original Claim One was amended to be specified as a "booster converter" in Claim One. (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 11). Second, the term "multiplier" in Original Claim Four was designated a "switching analog multiplier circuit" in Claim One. (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 12). Third, "current means connected" in Original Claim Five was changed in Claim One to "circuit means including a pulse-width modulator connected." (*Compare* Elson Decl., Exh. 1, 10 *with* Elson Decl., Exh. 2, 12). Therefore, the Patent Office accepted the amendments of Original Claims One through Five as distinguished from prior art based on these substantive changes, which included the switching limitation. Accordingly, a power supply that uses a "non-switching" multiplier, the precise converse of a "switching" multiplier, must fall outside of the permissible range of equivalents, as estopped by the file wrapper doctrine.

c. The "Switching Analog Multiplier Circuit" Does Not Constitute Means-Plus-Function Language.

Patent claims must "particularly point[ ] out and distinctly claim[ ] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. Traditionally, a claim will comply with this statutory requirement by

describing in detail the structure that constitutes the invention. Alternatively, however, claims may describe their subject matter by the use of "means-plus-function" language. Specifically, under Section 112, "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof." 35 U.S.C. § 112. In short, the "means-plus-function limitation contemplated by [Section 112] recites a function to be performed rather than definite structure or materials for performing that function." *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indust., Inc.*, 145 F.3d 1303, 1307 (Fed. Cir. 1998).

However, means-plus-function language only covers "the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112. Section 112, therefore, " 'rules out the possibility that any and every means which performs the function specified in the claim *literally* satisfies that limitation.' " *Id.* at 1309 (quoting *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (emphasis in original)). Rather, the proper test is whether the "differences between the structure in the accused device and any disclosed in the specification are insubstantial." *Id.* (citing *Valmont Indus., Inc v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed. Cir. 1993)).

Currently, the parties dispute whether the "switching analog multiplier circuit" constitutes means-plus-function language. (Motion, 12:7-14:10; Opposition, 14:16-18:9). If the term does constitute means-plus-function language, then the Court must construe it only to cover the structure disclosed in the specification or its

equivalents. If the language is not, then it is not limited to the contents of the specification.

Traditionally, claim drafters use the preface "means for" or "step for" to signal means-plus-function language. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996).

> [T]he use of the term "means" has come to be so closely associated with "means-plus-function" claiming that it is fair to say that the use of the term "means" (particularly as used in the phrase "means for") generally invokes section 112(6) and that the use of a different formulation generally does not.

Id. at 1584. At the same time, use of the word "means" is not talismanic: Its invocation does not absolutely require means-plus-function treatment, while its absence does not absolutely preclude it. *See Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 531 (Fed. Cir. 1996). In addition to the identification of "means" language, a trial court must "decide on an element-by-element basis, based upon the patent and its prosecution history, whether § 112 [means-plus-function language] applies." *Id.* at 531. "To invoke this statute, the alleged means-plus-function claim element must not recite a definite structure which performs the described function." *Id.* However, the recitation of some structure does not preclude application of the statute. *See Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533, 1536 (Fed. Cir. 1991).

Applying this test to the "switching analog multiplier circuit," the Court finds that the phrase does not embody means-plus-function language. As a threshold issue, the word "means" does not modify the phrase "switching

analog multiplier circuit." More significantly, a "switching analog multiplier circuit" is itself a structure. The parties do not dispute that the word "circuit" embodies an electrical system. (Motion, 38:10-11). The circuit is also physically connected to a voltage error amplifier and a rectifier circuit, further implying structure. (Elson Decl., Exh. 1, 10:25-27). In addition, when the name of a recited term has a "reasonably understood" and concrete meaning in the art, this recognition can serve as "important" evidence of a structure. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed Cir. 1996). The defendant itself admits that "[s]withcing [sic] analog multiplier circuits were known in the power supply art at the time the patent application . . . was filed." (Blauschild Decl. 7:4-5). This suggests that the term represents a concrete entity known in the art, rather than mere short-hand language for a function particular to this patent. All these factors together support the finding that the phrase does not constitute means-plus-function language.

2. "Circuit Means."

Next, the parties dispute whether the language "circuit means" constitutes means-plus-function language. (Elson Decl., Exh. 1, 10:35-36; Motion, 17:1-18:13; Opposition, 20:11-21:14). The phrase contains the word "means," suggesting that it invokes such language. At the same time, the phrase contains language involving structure. First, the word "circuit," although a vague term, recites a physical structure. Neither of the parties dispute that a circuit is a generic term for an electronic system. (Motion, 38:10-11). However, defendant objects that because the term is generic and vague, and "[t]here would be nearly

infinite ways to implement such a means," the phrase must constitute means-plus-function language. (Opposition, 21:5). The Federal Circuit reviewed a similar argument in *Greenberg v. Ethicon Endo-Surgery. Inc.* 91 F.3d 1580, 1583 (Fed. Cir. 1996). In that case, the Circuit held that the term 'detent,' though generic, could constitute structure: "It is true that the term 'detent' does not call to mind a single well-defined structure, but the same could be said of other commonplace structural terms such as 'clamp' or 'container.' " Therefore, even if the word "circuit" does not invoke a single, well-defined mechanism, it can still constitute structure. In addition, the circuit means "includ[es] a pulse-width modulator connected to said current amplifier and responsive to said current error signal therefrom." (Elson Decl., Exh. 1, 10:35-36). In other words, the circuit means is physically connected to the current amplifier, thereby suggesting structure. Finally, the pulse width modulator, to which the "circuit means" is connected, is a recognized structure in the art, which neither party disputes. (Opposition, 20:27-21:8; Reply, 18:22-23).

When evidence of "means-plus-function" language conflicts with the use of the word "means" and the concurrent recitation of structure, such as in the present case, courts must determine whether the disputed term on the aggregate describes solely the constitution of a recited structure or the performance of a function. *See Laitram Corp v. Rexcord, Inc.*, 939 F.2d 1533, 1536 (Fed. Cir. 1991). If the latter, then the term constitutes mean [sic]-plus-function language. *See id.* In the present case, even though the claim does recite some structure, it describes a function. The circuit means must be "*responsive* to said current

error signal therefrom for *introducing* said switching control signal to said power switch." (Elson Decl., Exh. 1, 10:35-39). This responsiveness and introductory function requires the finding that "circuit means" constitutes means-plus-function language. Stated in other terms, the claim does not merely recite structure but discloses how the circuit is to effect the "signal to said power switch," thereby constituting a means for performing a function. (Elson Decl., Exh. 1, 10:35-39). Accordingly, "circuit means" must cover "the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112.

However, plaintiff argues that even if "circuit means" is interpreted to constitute "means-plus-function" language, Figure Four of the '366 serves as an alternative embodiment of "circuit means." (Reply, 20:3-6). Plaintiff provides no admissible evidence in support of this contention.[1] Therefore, the Court cannot find that Figure Four is an equivalent of "circuit means."

C. Remaining Disputed Terms.

As detailed in the "Procedural History" section of this opinion, the Court on three different occasions rejected plaintiff's arguments that the Court could only interpret two terms of '366. In its motion, plaintiff for a fourth time raises argument that defendant improperly

---

[1] Plaintiff cites to Paragraph 59 of the Wilkinson declaration to evidence that one skilled in the art would view Figure Four as an equivalent of "circuit means." (Motion, 18:6-13; Reply, 20:3-6). The Court sustains defendant's objection to Paragraph 59 as lacking foundation.

identifies terms not in controversy for interpretation. (Motion, 19:9-20:2). Instead of briefing these remaining terms, plaintiff refers the Court to paragraphs sixty-three through ninety-seven of Bruce L. Wilkinson's declaration. Not only does this tactic provide plaintiff more space in its motion to brief the few terms it identifies as being in dispute,[2] but this reference also provides the Court with little support in interpreting these terms. Mr. Wilkinson is an engineer, and therefore, his declaration is devoid completely of legal argument. Defendant, which briefed all the terms, was left to anticipate plaintiff's arguments, and accordingly, a complete round of legal briefing was never effected.

The Court reminds plaintiff that trial courts are to interpret patent claims before infringement proceedings.

> The meaning of claim terms is the central issue of patent litigation. With most aspects of trial hanging on this determination – now "strictly a question of law for the court" – a conscientious court will generally endeavor to make this ruling before trial.

Loral Fairchild Corp. v. Victor Co. Of Japan, Ltd., 911 F.Supp. 76, 79 (E.D.N.Y. 1996) (quoting *Markman v. Westview Instruments, Inc.*, 53 F.3d 967, 977 (Fed. Cir. 1995)). The Court and the parties cannot determine with any precision before actual interpretation which terms and term meanings will affect the outcome of the infringement proceedings. Moreover, plaintiff agreed that both sides would submit to the Court terms that they believed were

---

[2] The length of the patent interpretation papers in this case was a highly contentious issue, as outlined in the "Procedural History" section of this order.

in dispute. Plaintiff has not demonstrated any bad faith on the part of defendant in identifying the number of terms that it did, and without more, plaintiff must abide by the procedures that the Court ordered.

The disagreement between the parties over which terms are in dispute manifested itself in other areas of the interpretation briefing. For example, the Second Amended Statement of Patent Claim Terms fails to identify the "inverse-square function" terminology as in dispute but instead indicates that the parties have agreed upon the term. (Plaintiff's Interpretations, Exh. A, 4, Exh. B, 6; Defendant's Interpretations, Exh. A, 6). Yet, plaintiff devotes five pages of its motion arguing whether the function need only be substantially performed and under what conditions. (Motion, 2-6). Defendant does not directly address either of these arguments.

Especially in light of plaintiff's indication that it is in agreement with defendant on additional terms, the Court hereby ORDERS the parties to file a joint Third Amended Statement of Patent Claim Interpretations one week from the date of this order. This statement shall identify those terms still in dispute, if any, and plaintiff's and defendant's interpretations. Three weeks from the identification of terms still in dispute, the Court ORDERS plaintiff to submit supplemental *Markman* papers concerning those terms. The Court ORDERS Defendant to file its opposition to plaintiff's supplemental interpretations three weeks from plaintiff's filing. Plaintiff may file a reply two weeks from the filing of defendant's opposition. These papers shall stand on their own without reference to the original *Markman* briefings. This second set of

Markman papers shall clearly identify the terms in dispute in their headings. The papers shall not discuss infringement issues, which are *not* currently before the Court. After receipt of the *Markman* papers, the Court shall SCHEDULE a hearing date for the interpretation of remaining terms.

IV. CONCLUSION.

The Court hereby INTERPRETS Claim One's "switching analog multiplier circuit as follows: (1) the plain language of the patent and its prosecution history require that Claim One contains the limiting effect of the modifier "switching"; (2) therefore, the doctrine of file wrapper estoppel precludes the finding that a "non-switching" multiplier is equivalent to a "switching multiplier"; and (3) the phrase does not constitute means-plus-function language. The Court hereby INTERPRETS Claim One's "circuit means" to constitute means-plus-function language. The Court ORDERS the parties to file additional briefing on the interpretation of all other terms in dispute, if any, in compliance with the procedures detailed above.

IT IS SO ORDERED.

DATED: 11/10/98

/s/ Lourdes G. Baird
LOURDES G. BAIRD
United States District Judge

Unofficial Transcript of Oral Argument Before the Federal Circuit (October 5, 2000)[1]

JUDGE: Now, we've had a flurry of papers arguing about the demonstrative evidence you want to use today.

MR. BROWN: Yes, Your Honor.

JUDGE: How many matters were there? Just the one? We are going to grant the motion objecting to that item and it will not be used.

MR. BROWN: May I instead, Your Honor, mark on a blank sheet of paper some of the points I make today?

JUDGE: May you what?

MR. BROWN: May I instead mark on a blank sheet of paper, the reverse side of that, some of the points I make today to the Court?

JUDGE: Why don't we just have oral argument?

MR. BROWN: Very well. Thank you. One of the principal questions the Court has to address on this appeal is whether it should impose a file wrapper estoppel against an inconsequential difference in order to permit an inconsequential difference to avoid infringement. And in answering that question I'd like to review some of the

---

[1] The Federal Circuit maintains audio recordings of oral argument. *See* Fed. Cir. R. 34 (practice note). This written transcript was generated by counsel for Micro Linear for the convenience of the Court.

key points in the prosecution history. The record shows at the time of the first office action that there were six claims among others that were pending. Claim 1 of course was independent, and claims 2 through 6 were dependent upon claim 1, either directly or indirectly.

JUDGE: But you ended up with a claim 1 which recites a switching multiplier circuit, right?

MR. BROWN: Absolutely.

JUDGE: And what you're trying to do is squirm away from the word "switching," because the accused device is non-switching, is that right?

MR. BROWN: That's correct.

JUDGE: How can you avoid – even if that word "switching" had been there originally, you'd probably be out of court. But you put it in. You put it in, and there was prior art. Carpenter, right?

MR. BROWN: There was what?

JUDGE: Prior art. Carpenter. Isn't that the prior art?

MR. BROWN: Carpenter.

JUDGE: Carpenter, yes, sorry. I left Boston only 45 years ago. And that was a non-switching amplifier [*sic*, multiplier], right?

MR. BROWN: You're saying – oh, yes.

JUDGE: Yes. And so the word "switching" distinguishes over Carpenter.

MR. BROWN: Yes.

JUDGE: It's pretty clear, isn't it?

MR. BROWN: You do have your facts right, Your Honor. But the answer is not clear, and that is not the correct answer. And the reason is the record shows that claim 6 – the record shows, of course, that the examiner rejected claims 1 through 5 based on prior art. You know that. The record also shows that the examiner did not reject claim 6 based on prior art. And the record shows that the only difference between claim 6, the non-rejected claim, and the other claims, for instance claim 5, was that claim 6 added a modulator, and modulator was also missing from Carpenter. In other words, what the record shows is that the Patent Office was ready to issue a claim without "switching."

JUDGE: But you wanted to make sure, or whoever was prosecuting the patent, wanted to make sure the patent was valid, claim 1 was valid, and so you put in all the limitations that would distinguish over Carpenter, including "switching."

MR. BROWN: No. You could say that, but the record doesn't show that. What the objective view of the record is, and of course of it's the competitor's view of the record, what he would reasonably observe in the record, is he's going to see in accordance with traditional Patent Office practice, in accordance with the C.F.R. and the M.P.E.P., that an examiner is supposed to assert all objections that he has as soon as possible. So he's going to see that the Patent Office was ready to issue claim 6 if two things were done. One, the very minor problem in the form of its language was corrected. And two, it was rewritten in independent format. And in fact, when you

look at the record, that's exactly what happened. That's exactly – that was the deal between the patent applicant and the Patent Office. The Patent Office said claim 6 has a form problem, we're not going to allow it because of that. The applicant responded in his remarks, says okay, I'm going to acquiesce to everything you're saying here. The deal I'll make with you is that I'll do what you're saying. I'll fix the problem in form and I'll rewrite claim 6 in independent form. That was what the applicant said in the remarks.

JUDGE: But he didn't rewrite claim 6, did he?

MR. BROWN: Not entirely. You're right, Your Honor.

JUDGE: He incorporated its limitations into 1.

MR. BROWN: But the deal that any reasonable person reading that file will see was made was the rewriting and the correction of the form error. And when you see that deal and that is what distinguishes this case from *Warner-Jenkinson*, from all of the other cases. None of the other cases involved a situation where the record clearly showed with illumination what it was the applicant would need to do to overcome the problem.

JUDGE: Well, we're certainly reasonable persons.

MR. BROWN: I know you are, Your Honor. That's why I'm here.

JUDGE: Isn't the thing to do then, to correct the applicant's mistake in putting "switching" in claim 1 through reissue or reexamination or something rather than leaving it there for the public to read and be, in your view, misled by, until someone gets sued for infringement?

MR. BROWN: That certainly is an option, Your Honor, that of course is only available for up to two years. And it's an option that exists in every case in which the doctrine of equivalents is asserted. So this case is not –

JUDGE: So this is worse than equivalents. You're saying "switching" is there by mistake, not that switching and non-switching are equivalent. You can't say they're equivalent because of the prior art.

MR. BROWN: No, you can say that they're equivalent. They are equivalent. They're factually equivalent. It's not just a switching, it's a switching analog multiplier. The accused product has a multiplier. It is analog. It just happens not to be switching. So the factual issue of whether there can be equivalency was actually not determined by the trial court below and I can certainly make a proffer that we're fully prepared to prove equivalency. So the opportunity to correct a unduly narrow provision of a claim through a reissue has never been held to be a bar to the resort to the doctrine of equivalents. And it should not be so held in this case.

JUDGE: It's a dilemma isn't it – I appreciate the reason why we're here is this dilemma, to take a clear limitation which in the course of prosecution is inserted, someone reading it could just as well conclude it was inserted because of a reference that was cited or not cited, but in any case because of a reference. And then to say as you tell us it was a mistake. Not that they're equivalent, but that it was a mistake to put that in the claim.

MR. BROWN: Well, I say both, to be clear. It was a mistake, and it is shown by the record. It's shown by the fact that what was going on was an operation of merging

six claims together into one, rather complex process. So the possibility of something happening is understandable. The record shows that there was also a dependent claim number 7. 7 was dependent on 1, both before and after the amendment. And 7 affirmatively recited in even a clearer fashion "switching" as a new element. So someone looking at the file, it just isn't listening to me saying this, I'm just not making this up for the first time today to address an issue. You can see it from the file. You can see from the file that a mistake was made. You can see from the remarks that what the applicant was intending to do is what he told the Patent Office, incorporate the limitations of the dependent claims 2 through 6 into 1. To write 6 in independent form. He didn't say he was adding an additional limitation. And the mistake is further shown by the fact of the rejection provided by the Patent Office. Claim 6 was not rejected on art. There was no requirement for any substantive amendment to claim 6. There was only a requirement that a matter of form be corrected. The *Warner-Jenkinson* presumption that even gives rise to the issues which we're talking about today has a predicate of a required amendment. They said four times in the case the presumption follows, and as you know, when an amendment's required, there was no substantive amendment required of claim 6 at all. We know from Judge Stone in the *Earl Supply* [*sic*] case as far back as 1942. We know that file wrapper doesn't apply to original limitations. And we know that each limitation put in the claim from the start is put there to avoid prior art. So that's not the issue. The issue was this a required amendment. It was not. The issue is whether if you nevertheless believe there's a presumption, this record overcomes it,

and it does. The record shows that the Patent Office, the deal was made before "switching" was added. The deal was you correct the form in the claim, you rewrite it in independent format, and it's very apparent that "switching" is not part of that deal. And this is what distinguishes this case from *Warner-Jenkinson*, from all of the other cases.

JUDGE: "Switching" originally in claim 6 had originally incorporated claim 4 by reference, and when you amended it, claim 6 added the multiplier.

MR. BROWN: Words are a little confusing. You had a modulator.

JUDGE: Wouldn't it logically suggest that you were trying to be emphatic? You made a mistake, but you embellished on what you had had before, be more specific, and more emphatic.

MR. BROWN: Well, let's see. The element that claim 6 had that distinguished it from the others was a modulator. What was added was "switching" which they're just completely different components of the system. And I'll reserve the rest of my time. Thank you.

JUDGE: Ms. Elson.

MS. ELSON: Good morning, Your Honors. Vera Elson on behalf of Micro Linear Corporation. Mr. Brown starts out with claiming there's some sort of deal with the Patent Office, but perhaps if we turn right to the portion of the remarks, the applicant's remarks to the Patent Office, I believe this is the crux of the dispute at A125 in the Appendix. What the applicants actually said to the Patent Office after incorporating and consolidating all of

the limitations of claims 1 through 6 and adding the "switching" limitation to what became claim 1 after making those amendments. What the applicants said, specifically, in the middle of the remarks section is "the amended claim 1 recites in precise details the various elements and components of the overall combination of the invention which results in the switched power supply having the desired characteristics representing the intendments and purpose of the present invention. It is believed clear that there is no showing in the cited Carpenter patent of the specific combination set forth in amended claim 1." In other words, as an expedient to get these claims allowed, the applicant retreated to the more "precise details" of its disclosed invention and basically made the choice, made the conscious choice, not to submit a claim without the "switching" limitation.

JUDGE: But it doesn't say that. It didn't mention "switching" in the remarks to the examiner accompanying the amendment of the rewriting of claim 1. It didn't mention "switching," he says that was a mistake, we didn't have to put that in claim 1, we've got that in the subordinate claims and we didn't intend to put it in claim 1 and anybody reading it would know that that was a mistake.

MS. ELSON: Yes, Your Honor, and we respectfully would disagree that that was a mistake or that anyone reading it would presume it to be a mistake, in fact –

JUDGE: Mistake or not it doesn't matter. It's there.

MS. ELSON: That's right. A reasonable competitor was entitled to rely on that prosecution history, see that the switching limitation was added, and interestingly on

the record, not just in the abstract, we have two reasonable competitors who looked at this prosecution history and both concluded, both Micro Linear in their opinion letter to Unitrode, and Unitrode in its opinion letter to Micro Linear which I can –

JUDGE: You're not saying we should interpret claims based on opinion letters of counsel.

Ms. ELSON: No, Your Honor, but it just happens that in this case two reasonable competitors, in reality, looked at these claims and concluded, both from outside counsel, that the switching limitation was the operative limitation, and that prosecution history estoppel would apply to anything that was non-switching.

JUDGE: That would be perhaps valid in interpreting the claim based on what its ordinary reading and writing is, but he also says there's no estoppel against an equivalency between switching and non-switching and again the portion of the prosecution history that you read to us does not flag "switching" as providing any distinction on which patentability is based. It just says I've put everything together, it doesn't mention "switching" particularly. So why would that produce an estoppel towards equivalency.

Ms. ELSON: Because, Your Honor, the Carpenter reference did include a multiplier so the obvious inference to anyone reading this file history is that the switching limitation was intentionally added to overcome the Carpenter reference.

JUDGE: But how do we know. There are a lot of other changes that were made in that claim as well which

would, taken together distinguish, did distinguish, the Patent Office said, from the prior art so why should we assume that this particular word was inserted for any particular purpose sufficient to provide an estoppel as to that specific limitation.

Ms. ELSON: There were other, the only two limitations that have been raised in the papers are the switching limitation and the pulse width modulator. In the declaration of Blauschild which was included in the appendix, Mr. Blauschild discloses that there were several other of the cited references that included a pulse width modulator, moreover some non-cited references also included a pulse width modulator. That would be at A1751 "for the patent cited on the face of the '366 patent disclosed the use of a pulse width modulator," and in the chart which is at A1766, someone reading this file history, it would be very dubious that the pulse width modulator alone would have gained allowance, that it was the "switching" element that was really the crux of it which is actually what counsel for Pioneer argued to the District Court that it was in the quoted portion of a November 13th, I believe it was 1997 transcript, it is counsel for Pioneer who says that we should only interpret the "switching" element, that it is the "principal" element at issue here and that it would be dispositive. Unlike Mr. Brown's representation, there was certainly no deal with the Patent Office. The Patent Office rejected claim 6 based on indefiniteness and did not indicate, and I think this is very important to note, did not indicate that that claim, if rewritten in independent form, would have been allowable. And in fact there is section 707 of the M.P.E.P. which says the examiner should have said so if he thought so.

JUDGE: That's the implication isn't it? Getting away from the word "deal" which has an odious implication. When there's a rejection the implication is if you respond to the rejection the claim would be allowed even without the formality which the M.P.E.P. sort of recommends.

Ms. ELSON: Correct, Your Honor. So there was certainly no deal and it was the patentee's choice to go with adding additional limitations and we submit that was to ensure allowance of the claims in a more expeditious manner. They obviously intended to engage in a licensing program following issuance of the claim. Just looking more analytically at the approach that we should make here under *Warner-Jenkinson*, we've got to consider why was the amendment made. We submit that it was certainly not unrelated to patentability. Pioneer argues in its brief that the amendment was voluntary, which frankly directly contradicts the argument they made in the underlying District Court which was that the amendment was inadvertent, a mistake, and clear error, and I would cite A1077 where they quote Mr. Beecher, the prosecuting attorney, submits a declaration saying "unfortunately and not realized by me at the time I inadvertently added the word switching," yet now they claim it was done voluntarily. The patent attorney's declaration –

JUDGE: You mean voluntarily as opposed to required.

Ms. ELSON: Voluntarily, volition, intentionally, that it was somehow added for clarification, whatever you would argue that to be, it's certainly not inadvertent. So we submit that argument really can't be considered because it was first raised on appeal first of all, moreover

the prosecuting attorney under several cases, *Lear Siegler* and *Senmed*, is a formulation for litigation years after prosecution and should be immaterial to the claim construction and that's the only thing they really rely on for the voluntary arguments. Certainly it can't be unrelated to patentability. Moreover, the declaration is not part of the public record and this violates the public notice function of the patent. So now we look to see perhaps was it unclear, the second prong discussed in *Warner-Jenkinson*, and we submit that it's not unclear, but to the extent someone could argue that it is unclear, it certainly was the patentee's choice to make that amendment, and it's not clear because they didn't choose to pursue whether the claim would have been allowed without the amendment. Although, and the court has said, the Supreme Court, "as between the patentee who had a clear opportunity to negotiate broader claims but did not do so and the public at large, it is the patentee who must bear the cost of failure to seek protection for the foreseeable alteration of its claimed structure," citing *Sage*. If the court concludes that the reason is unclear and certainly the District Court had some questions, the District Court in its opinion said that "while the plaintiff provides a possible explanation for inconsistencies between the original and amended applications, it by no means dispels all questions concerning the prosecution history," this was at A23. So if we conclude that it's simply unclear then the presumption applies and the range of equivalence should be zero. Now if we consider what we submit, which is that it was clearly to overcome the Carpenter reference, we should consider the approach in *Sextant* really is the, the approach is laid out there to consider what is the

scope of estoppel. First we would submit that Pioneer did not dispute the first part of the District Court's opinion, which really discussed the all elements rule. The court concluded, made a finding that "switching" is the "precise converse of non-switching." Pioneer does not appeal that finding and the standard would be clear error but they simply didn't appeal it, and moreover they stipulated, they stipulated and did not try to argue there was some range of equivalence in front of the District Court. We never reached summary judgment, summary judgment was simply deemed granted and they stipulated to that. So the only question they raised on appeal is does prosecution history estoppel apply. That's why we're here.

JUDGE: "Switching" is a property of an element, it's not an element itself, is it? It's a limitation, it's a description, but other than that there couldn't ever be any equivalent of anything.

Ms. ELSON: I would disagree, Your Honor. We have the declaration of the expert Blauschild which the court relied on to look at the term "switching." The term "switching" itself is not, the switching analog multiplier that the disclosure refers to, and by the way the disclosure is a switching analog multiplier, does not define the term "switching" in and of itself. Although it does show a clock circuit which is characteristic of a switching analog multiplier. Mr. Blauschild, basically, in his declaration said that the switching and non-switching are two classes of analog multipliers and Pioneer – the court found that "switching" is the precise converse.

JUDGE: Isn't that the element, the multiplier is the element and some switch and some don't switch.

Ms. ELSON: Correct, there are two different classes of circuits that we can draw a dividing line down the middle because the court found, and this finding has not been appealed, that switching is the precise converse of non-switching. So going with that, going with Mr. Blauschild's declaration which puts them into two complete different classes, then we have Pioneer stipulating to the court's findings other than the application of prosecution history estoppel.

JUDGE: But they didn't stipulate that non-switching and switching are not equivalent. That's an issue in this case. They didn't stipulate that away.

Ms. ELSON: What they stipulated was that they would not appeal the court's ruling under the all elements rule which was the first part of the court's decision, finding that, to try and derive some kind of equivalence out of switching. To impede upon the non-switching category of devices would be to vitiate the claim element. They specifically added "switching," they told the patent examiner they were trying to set out the "precise details" of their circuitry, what they disclosed was the switching analog multiplier. I would cite, actually there has been some recent case law that is directly on point, which was not cited in the briefs because they are fairly new. One is *Moore v. Standard Register Company*, decided September 22nd. In this case there was a majority-minority discussion which is applicable. There was also the case of *CAE Screenplates v. Fiedler*. I apologize, I don't have the cites, there are just the slip opinions. That

this was decided August 24th, 2000 and this was also very similar as far as the bottom plate limitation. *Sextant* is also on point as well as *Kinzenbaw* which is at 741 F.2d 383 and *Tronzo v. Biomet*, 156 F.3d 1154. In all these cases there was a limitation such as hemispherical, for example. The "hemispherical" did modify something, but it was decided that the hemispherical limitation was a limitation and I see that I am out of time. But in those cases the distinction was drawn, basically Pioneer has stipulated to that. The only question is the scope of equivalence. So we look at how a reasonable competitor would have interpreted that file history, and we submit a reasonable competitor could only have interpreted it, as two did, to mean that "switching" means "switching," frankly. Thank you.

JUDGE: Mr. Brown.

MR. BROWN: Thank you. Let me first address a comment you, Judge Mayer, made during counsel's argument. I think you said "mistake doesn't matter." Let me, with all respect, challenge that, that statement Your Honor. I think mistake does matter. A mistake if we can show it, and I think we have, is a reason that is not related to patentability. I believe a mistake does matter, Your Honor. Secondly, it's argued that because the applicant said the specific combination is not in the prior art, that all of a sudden there's an estoppel across the board on every component.

JUDGE: Isn't the reissue statute precisely intended to deal with a mistake?

MR. BROWN: Yes.

JUDGE: And if there was really a mistake, your client had two years to deal with it.

MR. BROWN: You're right Your Honor, unfortunately as a practical matter, I hope Your Honor can appreciate –

JUDGE: But you're asking us to override the limitations of a statute, which has a means with dealing with mistake.

MR. BROWN: No. I'm asking you to frankly comply with the Supreme Court's repeated admonishment that a litigant is entitled to a range of equivalence and not to take that away from us. That's all I'm asking the Court. It was argued that, again, the specific combination is not in the art, but that was not a statement that each element was missing from the art, but simply a statement of novelty that every applicant's required to make. To be sure, we are not trying to read this claim on a combination of old elements. It's argued that "switching" was required. Not even the examiner agreed with that position. The record shows that he stood ready to issue claim 6 without "switching." It had the modulator which distinguished it, and Carpenter was missing the modulator. There was mention made of the scope of estoppel, maybe that's worthy to comment upon for a moment. The *Read* case. When you look at this record, what do you see? You see the word "switching," which clearly, we say had no significance, but if you are going to engage in a presumption, if you're going not to find this record, not to overrule that presumption, you have to at least concede it's of very minor significance. Where it was the word modulator, in claim 6, that the examiner, persuaded the examiner not to object to that claim on art. The *Read* case says, as

I'm sure you know, that where there's a number of arguments for patentability there's not an estoppel against each one. Because the Court said that that would mean that the further away the prior art is from an invention, the less protection it would get. That's the rule that should apply in this case if the Court is going to find an estoppel. But I would submit to the Court, and I say it again, this case is different from all the ones that have come before the Court before in this area. The cases that came before, there was a rejection but there was no clue from the Patent Office as to what to do to overcome the rejection, therefore every single thing the applicant did in response to that rejection was either clearly to overcome it or presume to overcome it because of the suspicion. This case is different, we have claim 6. It cannot be ignored when you look at defense counsel's brief, I think there's only one sentence in the entire brief, all 50 pages, that talks about claim 6, because claim 6 is what makes the difference in this case. You have claims 6, you have an examiner who has not rejected it on art. It has a limitation, it's not "switching." The applicant's remarks clearly indicate he is acquiescent to the examiner's objections. He's not challenging a single one. His goal is to incorporate the limitations together and to write it in independent format. That was the deal, and I think the deal matters. This Court said in *Sage Products* that the purpose of an estoppel is to prevent the applicant from retrading or reneging on a deal. When you look at this case, unlike the prior cases of this Court, in *Warner-Jenkinson*, the deal is clear. And it is also clear that "switching" is not part of that deal. The reason for estoppel doesn't exist here. And

I respectfully submit that that should be the ruling of this Court. Thank you.

JUDGE: Thank you, case is submitted.
